U.S. DEPARTMENT OF TRANSPORTATION

16th Annual Report
Fiscal Year 1982

BEST COPY AVAILABLE

BLANK PAGE

Contents

SUMMARY 1

PROGRESS REPORTS 5

Office of the Secretary
United States Coast Guard
Federal Aviation Administration
Federal Highway Administration
Federal Railroad Administration
National Highway Traffic Safety Administration
Urban Mass Transportation Administration
Maritime Administration
Saint Lawrence Seaway Development Administration
Research and Special Programs Administration

APPENDIX 53

Table I. U.S. Department of Transportation Budget Authority, Obligations and Outlays, Fiscal Year 1982.

Table II. U.S. Department of Transportation Employment in Authorized Full-Time Permanent Positions, Fiscal Year 1982.

Table III. U.S. Department of Transportation Full-Time Civilian Minority and Female Employment, 1972-82.

Table IV. U.S. Coast Guard Financial Statement, Fiscal Year 1982.

Table V. Hijacking Attempts on U.S. and Foreign Aircraft, Including General Aviation Aircraft, Calendar Years 1971-81.

Table VI. U.S. Airline Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1972-81.

Table VII. U.S. Commuter Air Carrier Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1977-81.

Table VIII. U.S. Air Taxi Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1977-81.

Table IX. U.S. General Aviation Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1972-81.

Table X. Federal-Aid Highway Obligations, Fiscal Years 1972-82.

Table XI. Federal Highway Administration Motor Carrier Safety Inspection Activity, Calendar Years 1974-82.

Table XII. Summary of U.S. Train Accidents and Casualties, Calendar Years 1974-82.

Table XIII. Summary of Accidents and Casualties at Public Rail-Highway Crossings, Calendar Years 1974-82.

Table XIV. Alaska Railroad Revenue Freight Traffic, by Commodity, Fiscal Years 1975-82.

Table XV. Amtrak Passengers, Passenger Miles, Daily Train Miles, Revenues, Costs, Deficit, and Ratios, Fiscal Years 1972-82.

Table XVI. Summary of U.S. Motor Vehicle Activities and Fatalities, Calendar Years 1972-82.

Table XVII. Summary of U.S. Monthly Traffic Fatalities, Motor Vehicle Mileage, and Fatality Rates, Calendar Years 1977-82.

Table XVIII. Summary of Reported Gas Pipeline Failures and Casualties, Calendar Years 1972-82.

Table XIX. Summary of Reported Liquid Pipeline Accidents and Casualties, Calendar Years 1972-82.

Table XX. Hazardous Materials Incidents, by Mode, Calendar Years 1972-82.

Table XXI. Hazardous Materials Casualties (Deaths and Injuries), by Mode, Calendar Years 1972-82.

Table XXII. Selected Maritime Data, Fiscal Years 1980-82.

Figure 1. U.S. Department of Transportation Obligations, Fiscal Year 1982.

Figure 2. U.S. Department of Transportation Employment in Authorized Full-Time Permanent Positions, Fiscal Year 1982.

Figure 3. Relative Changes in U.S. Air Carrier Accidents, Fatalities and Fatality Rate, Calendar Years 1972-81.

BEST COPY AVAILABLE

Figure 4. Relative Changes in General Aviation Accidents, Fatalities and Accident and Fatality Rates, Calendar Years 1972-81.

Figure 5. Relative Changes in Total and Interstate System Highway Obligations, Fiscal Years 1972-82.

Figure 6. Relative Changes in Amtrak Costs, Revenues, Operations and Performance, Fiscal Years 1973-82.

Figure 7. Relative Changes in U.S. Motor Vehicle Activities, Fatalities and Fatality Rate, Calendar Years 1972-82.

Figure 8. Relative Changes in U.S. Traffic Fatalities, Mileage, and Fatality Rates, Calendar Years 1980-82.

Figure 9. Relative Changes in Highway Fatalities by Principal Categories, Calendar Years 1972-82.

Figure 10. Relative Changes in Reported Gas Pipeline Failures and Casualties, Calendar Years 1972-82.

Figure 11. Relative Changes Reported in Liquid Pipeline Accidents and Casualties, Calendar Years 1972-82.

Figure 12. Relative Changes in Hazardous Materials Incidents and Casualties, Calendar Years 1972-82

BEST COPY AVAILABLE

Summary

BEST COPY AVAILABLE

Summary

The U.S. Department of Transportation (DOT) acts to ensure the coordination and administration of Federal transportation laws. The Department develops policies and programs to provide fast, safe and convenient transportation at the lowest possible cost.

The Department's more notable activities in fiscal year 1982 are summarized below. Detailed accounts of these and other Departmental activities appear in the Progress Reports section.

Regulatory Reform

During fiscal year 1982 the Department helped enact significant regulatory reform of the intercity bus industry and supported exemptions for railroad boxcar traffic and export coal from Interstate Commerce Commission regulations. The Department also worked for greater deregulation of highway construction design and urban highway planning.

Transportation Safety

Airlines enjoyed their second consecutive year without a catastrophic crash. Motor vehicle fatalities continued to decline. Railroad accidents and casualties also decreased. Both gas pipeline failures and casualties declined, although there was a slight increase in liquid pipeline accidents.

Marine Transportation

In fiscal year 1982, the U.S. Coast Guard responded to more than 74,800 calls for assistance and rescued over 163,000 people, more than 5,450 in life-threatening situations.

The Coast Guard seized a total of 173 vessels for narcotics trafficking during the fiscal year. Nearly 3.5 million pounds of marijuana were seized, with the total value of contraband interdicted exceeding $2.1 billion.

On October 9, 1981, the Coast Guard began a Haitian migrant interdiction operations. During its first full year, the flow of Haitian migrants was reduced to 164, compared with 15,093 in calendar year 1980. In 1982, the Coast Guard also intercepted 59 other foreign nationals attempting illegal entry into the U.S. and arrested 1,131 aliens associated with vessels that were smuggling narcotics.

Fishery conservations activities, both foreign and domestic, during the year resulted in 186 civil penalty actions and seizure of five foreign vessels.

During 1982, the Coast Guard issued 181 bridge permits and 41 drawbridge regulations. On September 30, 1982, 26 deep-draft merchant vessels totaling 844,000 dead weight tons (DWT) and valued at $1.8 billion were under construction or on order in American shipyards. The U.S.-flag, privately-owned, deep-draft merchant fleet totaled 710 vessels with a capacity to carry 24.5 million dead weight tons (DWT) of cargo. The total included 567 ocean-going ships, 483 active ships, and 84 inactive ships. In world fleet rankings, as of January 1, 1982, the U.S. privatelyowned ocean-going fleet placed 8th in carrying capacity and 11th in the number of ships. At the close of the fiscal year, 143 vessels were in the U.S. Great Lakes fleet.

More than 4,000 commercial ships carried 428 million metric tons of cargo through the Montreal-Lake Ontario section of the St. Lawrence Seaway in 1982, a 15 percent decrease from 1981. Grain cargos were almost equal to those of the previous year, but iron ore, export coals and general cargo tonnage declined.

In the domestic ocean shipping sector during fiscal year 1982, seven new merchant vessels totaling over 257,000 dead weight tons (DWT) of capacity were added to the U.S. flag fleet. The vessels were employed principally in the coast-wide trade.

Aviation

Aircraft hijackings increased significantly during fiscal year 1982. There were 10 hijackings of U.S. air carriers and one of a U.S. general aviation aircraft, up 83 percent from the year before.

The Federal Aviation Administration made significant strides in rebuilding the capacity of the air traffic control system, which had been severely reduced by the August 1981 Professional Air Traffic Controllers Organization (PATCO) illegal strike and the dismissal of 11,400 striking controllers. The dismissals had reduced FAA's full-performance level controllers to 3,607 (down from 13,311), developmental controllers to 592 (down from 3,064), and controller staff to 777 (down from 900). At the beginning of fiscal year 1982, the air traffic control system was operating at about 70 percent of pre-strike capacity. By September 1982 the air traffic control work force (not including supervisors) totaled 13,310, up 167 percent from the August 3, 1981 level. By the end of the fiscal year, it was operating at 90 percent of capacity.

On January 28, 1982, the FAA issued a national airspace system plan outlining the agency's proposal for updating and modernizing its air traffic control and navigation systems over the next two decades. The plan called for revamping the en route and terminal control systems, modernizing the flight service system, improving ground to air surveillance and communication, creating an integrated telecommunications network, and installing the new microwave landing system.

The Administration created a system to allocate airport slots to facilitate the operation of air carriers within the

BEST COPY AVAILABLE

reduced air traffic control capacity caused by the controller's strike.

FAA obligated $405.7 million for new airport planning and development grants and $6.5 million for increases in grants issued in previous years.

International Aviation

The Department participated in a number of bilateral and multilateral negotiations to improve U.S. carrier opportunities in international air transportation and enhance the availability of attractive air service to the traveling and shipping public. The Department led the effort to extend an agreement with the countries of the European Civil Aviation Conference (ECAC), which guarantees pricing flexibility for airlines within agreed fare-setting zones. The Department also concluded new or amended bilateral agreements with the United Kingdom, Malaysia, the Philippines and the Scandinavian countries. These agreements produced new service or pricing opportunities for U.S. airlines.

Highways

The Federal Aid Highway Act of 1981 attached the highest priority to programs designed to complete and preserve the Interstate system. At the end of fiscal year 1982, nearly 96 percent of the 42,500-mile Interstate system was in use.

During fiscal year 1982, obligated federal aid highway funds totaled $8.1 billion.

The highway bridge replacement and rehabilitation program continued to be successful and popular with state highway agencies.

During the fiscal year, approximately 1,000 federal aid traffic improvement projects were authorized for preliminary engineering, and 2,770 projects were authorized for construction. Total federal aid authorization for traffic improvements totaled $1.08 billion, a 55 percent increase over fiscal year 1981.

There were 44,723 traffic fatalities in fiscal year 1982, continuing the downward trend begun in 1981. Major factors contributing to the trend included a reduction in single vehicle, nighttime, and weekend accidents; a reduction in the number of young drivers; increased use of child safety seats; and economic factors.

Drunk drivers and the failure of most motorists to use their safety belts were the nation's most serious traffic safety problem. The National Highway Traffic Safety Administration began a major drunk driving awareness program in 1982. In addition, establishment of the Presidential Commission on Drunk Driving—plus continued emphasis by local advocacy groups, state and community governments, and police—generated considerable public awareness and action in this area. Similarly, a long-term national campaign was launched to convince motorists to use their safety belts.

Railroads

The number of reportable railroad accidents decreased by nearly 32 percent in calendar year 1981. A decrease occurred in every area except casualties involving trespassers and railroad personnel.

Work on the Northeast Corridor Improvement Project remained on schedule and more than $80 million in major construction contracts was awarded. Track work assigned to Amtrak's labor force was 95 percent complete by the end of the fiscal year. Amtrak was offering 2-hour, 49-minute Metroliner service on certain express lines between New York and Washington, with a better than 90 percent on-time record.

In calendar 1981, Conrail achieved the first profitable year in its history, generating $39 million in net income while decreasing its costs by 12.3 percent.

The Alaska Railroad enjoyed record levels of traffic with a 34 percent increase in freight tonnage and a 41 percent increase in revenues. It carried a record 175,116 passengers, 9 percent over the previous year.

Urban Mass Transportation

The Urban Mass Transportation Administration obligated $3.6 billion in transit assistance grants during the fiscal year. The obligated funds included urban discretionary grants, $1.6 billion; urban formula grants, $1.3 billion; Interstate transfer grants, $568 million; federal aid urban systems grants, $53 million; and non-urban formula grants, $74 million.

Construction continued on new rapid transit systems in Miami, Baltimore, Buffalo, and Atlanta.

Sixteen interstate withdrawal requests were approved under the Interstate Withdrawal Program, making the funds eligible for use in mass transit projects.

Materials Transportation

Gas pipeline failures decreased 19 percent in calendar year 1981, and casualties decreased 70 percent. Liquid pipeline accidents, however, increased by 3 percent.

Hazardous materials accidents continued to decline from their calendar year 1978 highs. Accident totals in all major modes—air, highway, railway, and water—declined from the preceding year.

REST COPY AVAILABLE

BLANK PAGE

Progress Reports

BEST COPY AVAILABLE

Office of the Secretary

The Office of the Secretary (OST) provides staff and advisory support for the Secretary and supports and coordinates activities of the various administrations of the Department. The Office of the Secretary also has primary responsibility for carrying out certain programs, which are covered in this progress report.

Transportation Policy

Transportation policy activities during fiscal year 1982 reflected overall policy goals of the administration:

- Reducing federal regulations and investments.
- Seeking user charges from the immediate beneficiary of federal transportation services or facilities.

Maritime Policy

The Secretary announced a series of policies aimed at helping the maritime industry become more competitive and financially stronger, to reduce government involvement in the industry and provide shippers with the benefits of a more flexible and rational regulatory system. The policy supported regulatory reform legislation, extension of temporary authority for subsidized carriers to build ships abroad, reform of the operating differential subsidy program, reform of regulations adversely affecting the shipping and shipbuilding industries, increased funding of the ship guarantee program and deregulation of the offshore trades.

Regulatory Reform

The Department proposed significant reforms of the intercity bus industry. The Bus Regulatory Reform Act of 1982, signed into law September 20, 1982, assured virtually open entry into the industry, removed inefficient operating restrictions, increased industry rate-making flexibility, and provided relief from burdensome state regulation in the areas of entry, exit, and ratemaking.

In 1982 the Department was in the forefront in the implementation of the President's regulatory relief program, reviewing an additional 15 of its most costly or controversial regulations. (It reviewed more than 40 such regulations last year.) To help ensure that the reviews were consistent and complete, the Department distributed a handbook on benefit-cost analysis to all Departmental personnel responsible for such assessments.

Industry Analysis

The Department participated in developing industry analyses and position papers for transportation policy issues brought before the Cabinet Council on Trade and Commerce, including:

- Economic and financial analyses of the airline and motor carrier industries.
- An assessment of coal slurry pipeline legislation.
- Analyses of the implications of exporting Alaskan oil.

The Department continued its study of the U.S. automobile industry. As required under the Chrysler Corporation Loan Guarantee Act, it submitted the second annual industry assessment to Congress in May 1982 (The U.S. Automobile Industry, 1981).

International Policy and Programs

The Department of Transportation continued to play a significant role formulating and implementing U.S. international aviation policy. Representatives participated in numerous bilateral and multilateral negotiations during the year to resolve issues and improve opportunities for travelers and carriers in air transportation. Notably, the Department led the effort to conclude a multilateral agreement with the member countries of the European Civil Aviation Conference which would guarantee pricing flexibility for airlines within agreed zones. It also concluded new or amended bilateral agreements with France, Japan, Brazil, Venezuela, the United Kingdom, China, the Philippines, El Salvador and Barbados to produce new service opportunities for U.S. airlines.

The Department tailored international cooperation activities to meet changed research priorities. It made the special needs of the Maritime Administration a focal point in dialogues with the Dutch, Federal Republic of Germany, and Japanese Ministries of Transport. Cooperation to improve air safety was reflected in discussions and agreements concluded with Transport Canada, in the continued interface with Soviet and British civil aviation specialists to develop safety equipment, and in discussions with the Japanese on air-collision avoidance systems. Research in Yugoslavia, funded with special currency, was expanded, and the Department hosted a very successful multi-city visit for the Bulgarian Minister of Transportation which has significance for U.S.-Bulgarian relations, the U.S. position in Eastern Europe, and commercial opportunities for the U.S. private sector.

BEST COPY AVAILABLE

International Trade

During the year, serious concerns were raised about inequities faced by U.S. motor carriers in competing for international traffic between the United States and Canada and the United States and Mexico. The Department played a leading role in analyzing the differences in legal and regulatory regimes of Canada and Mexico that created inequities for U.S. motor carriers competing for international traffic. Successful negotiations between the Department and Canadian officials permitted the President to lift the Congressionally-mandated two-year moratorium on grants of new operating authority as it applied to Canadian motor carriers. Discussions with Mexican officials were pursued actively.

The Department continued to be heavily involved in the analysis of issues brought before the Trade Policy Committee, including:

- International aircraft competitive environment.
- Trade in services.
- Government procurement standards.
- Harmonizing international standards and certification procedures.

The DOT Technical Assistance Program in Saudi Arabia featured a major review of the operations of the kingdom's bus company in 1982. As a result of the study, provisions will be made for better policy direction and more effective monitoring of the company by the Saudi Ministry of Communications. Other programs got underway that were designed to improve the Ministry's planning capabilities, its management information program, and the number and quality of training opportunities for its personnel. A project involving traffic safety and planning was still awaiting formal approval from the Ministry of the Interior.

Legislation

A major accomplishment during the year, in addition to the Bus Regulatory Reform Act of 1982 already mentioned, was the enactment of legislation for federal-aid for highways, airports, and airways. The Federal-Aid Highway Act of 1981 restructured the program to emphasize completing and preserving the U.S. Interstate. The Airport and Airway Development Act of 1982 reimposed aviation user fees at levels sufficient to pay about 72 percent of total FAA costs and about 50 percent of operating expenses. This legislation helped the Department prepare for the three major challenges of the next decade:

- Maintaining high safety standards, even as air traffic levels grow.
- Modernizing the government-operated air traffic control system.
- Providing sufficient airport and airway capacity to accommodate the future growth of aviation, particularly general aviation.

A major new Departmental proposal was a five-cent per gallon increase in highway user fees. The proposed new revenues of $5.5 billion per year would adequately fund the federal share of investments needed to advance construction of the interstate system and to proceed with the much-needed rehabilitation of the nation's highways, bridges, and transit systems. The proposal also addressed the issues of reallocating costs and revising truck size and weight limits. Costs would be reallocated so that each class of user (automobiles, light trucks, and heavy trucks) pays a fair share of the highway cost. Truck size and weight limits would be set at uniform standards for interstate use.

Coal Exports

This fiscal year interest continued in U.S. coal exports, particularly the capabilities for transporting coal from U.S. mines to ports and transferring coal to ships for delivery to foreign markets. The Department participated in the Coal Interagency Working Group, which provided a forum to identify and review potential domestic constraints on coal exports and to recommend any federal action needed. The Department was also involved in a number of activities related to proceedings of the Interstate Commerce Commission, including recovering costs of deep draft ports through user charges and relieving transportation constraints to coal export development.

Transportation for Handicapped Persons

Following issuance in 1981 of an interim final regulation amending the mass transit requirements of the Department's regulation on nondiscrimination against handicapped persons (Section 504 of the Rehabilitation Act of 1973), the Department developed a comprehensive revision of the rule. The proposed final rule would modify existing requirements with respect to federally-assisted urban mass transit, inter-city passenger rail service, airports and highways. The revisions would simplify the regulation, harmonize requirements concerning employment discrimination with federal court decisions and reduce administrative burdens. A draft notice of proposed rulemaking and preliminary regulatory analysis were completed at the end of the year.

Clean Air Act

The Department developed a proposed position for transportation aspects of the proposed Clean Air Act amendments. Removing mandatory aspects of transportation control measures from these proposed amendments would give state and local governments greater flexibility in achieving air quality goals and greater cost effectiveness.

BEST COPY AVAILABLE

Inspector General

Fiscal year 1982 was the third full year of operation for the Department's Office of Inspector General (OIG).

Five computer work stations were established for use on selected audits, investigations, and administrative functions to provide increased audit effectiveness and efficiency. These work stations reduced disruptions of the Department's computer operations, enhanced data security and independence, and brought state-of-the-art technology to the audit and investigative functions.

The Inspector General worked closely with top Departmental officials to administer the Department's cost avoidance, reduction, and efficiency program, and also worked closely with the President's Private Sector Task Force to perform a survey on cost control in the federal government. OIG helped the Urban Mass Transportation Administration to evaluate the effectiveness of its automated management information system. The Maritime Administration was given advice and assistance in the selection and implementation of a new automated accounting system. The Inspector General also became actively involved in reviewing the establishment of internal controls in the Department's program and administrative activities.

The Office issued a total of 2,041 audit reports during 1982. These included recommendations to improve the economy, efficiency, and effectiveness of Department of Transportation programs and operations which have a potential impact of $1.1 billion. They questioned $153 million of costs. Work continued on resolving audit findings, and 739 reports were closed during the year. The resolution of these reports resulted in audit savings of $651 million. As of September 30, 1982, the Department had only one unresolved report over 6 months old. It contained no cost findings that were questioned.

During the fiscal year 178 investigations were opened and 208 closed. Judicial dispositions included 117 indictments and 79 convictions with fines totaling $13.4 million, civil judgments of $2.9 million, 31 years sentenced, and 32 years of probation. Administration actions included debarments of 37 construction companies or individuals, and 50 personnel actions, such as suspensions, reprimands, restitutions and resignations. In addition to court-ordered fines and restitution, cost savings or avoidance efforts realized $415,635.

Bid-rigging continued to be one of the most significant areas of investigation. Investigations progressed to the prosecution stage in many of the states and resulted in 74 indictments, 134 convictions, $17.4 million in fines, 476 years in prison sentences, and 63 debarments since the investigation and prosecution effort began in early 1980.

A pilot survey on fraud prevention and detection of the Washington Metropolitan Area Transit Authority's construction contract modification, claims, and settlement process, begun during the year, disclosed major weaknesses in procurement practices and procedures. In addition, matters requiring possible investigation were being coordinated with the Department of Justice. Authority officials, in a preliminary response, indicated agreement with the findings and recommendations and initiated a major program evaluation and improvement effort.

Cost Recovery Policy

The Department developed a cost recovery policy for federal transportation programs based on the principle that, wherever possible, federal transportation outlays should be financed through charges levied directly on the user or immediate beneficiary, rather than through general taxes levied on the population as a whole. Consistent with this policy, analyses were conducted to initiate or improve user changes for the federal highway program, for certain Coast Guard services, for inland waterways and ports, for aviation services and the airport development program, and for Amtrak. In addition, legislative proposals to carry out the cost recovery policy were developed and sent to Congress for aviation, certain Coast Guard services, waterways and ports, and Amtrak.

Transportation Regulatory Reform

The Department was active in truck regulatory proceedings at the Interstate Commerce Commission, pressing for procompetitive implementation of the Motor Carrier Act of 1980. The Department also supported additional regulatory reforms proposed by the Commission. Less trucking regulations were expected to save consumers billions of dollars annually.

Following the Secretary's May 28, 1981, testimony before the House Public Works and Transportation Committee advocating total deregulation of the bus industry, the Department worked closely with Congress, the Interstate Commerce Commission, the bus industry, and public interest groups to develop bus regulatory reform legislation.

During the year, the Department proposed legislation to accelerate the abolition of the Civil Aeronautics Board. This was consistent with provisions of the Airline Deregulation Act, which called for phasing out airline regulation and abolishing the Board.

Regulatory Relief

An Office of Management and Budget staff report to the Presidential Task Force on Regulatory Relief estimated that large potential savings could be found through regulatory reviews conducted by the Department. Revis-

BEST COPY AVAILABLE

ing or rescinding Departmental rulings possibly could save approximately $1.3 billion in annual costs and $10.2 billion in one-time costs.

Automobile Industry Assessment

In response to directives from the President and Congress, the Department prepared a report on the long-term future of the automobile industry. The report was completed in January 1981. Later that month, the President asked the Secretary of Transportation to head a cabinet-level task force on the problems of the automobile industry. Departmental staff supported this task force and, in April, the President announced a program of actions to help the industry.

Ports Legislation

Several legislative proposals dealing with recovery of federal costs for deep-draft navigation were reviewed in light of the Administration's position that ports should reimburse the federal government for 100 percent of all costs for deep-draft navigation, including initial capital construction, as well as operations and maintenance. Analyses were also prepared assessing the impact on ports of such cost-recovery legislation on a nationwide scale and of the impact on selected ports, in terms of tonnage and navigation costs. Initial findings indicated that the impact would be small.

A deepwater port license was offered to Texas Offshore Port, Inc. (TOP) on September 21, 1981. TOP's license application was submitted on December 30, 1980, and the review, including coordination with other federal and state agencies, was completed in record time. TOP had until June 15, 1982, to decide whether or not to accept the license offer.

Construction of the LOOP deepwater port off the Louisiana Coast was completed, and the Department completed its review and approval of LOOP's operations manual. The port was undergoing tests which were to extend into November 1981. During the test period, LOOP was not operating as a common carrier, and its proposed tariff had not yet been filed with the Federal Energy Regulatory Commission.

Inland Waterway User Charges

During 1981, significant progress was made in developing a program for cost recovery on the inland navigation system. The Department of Transportation, in cooperation with the Department of Commerce, completed a major analysis of the impact of waterway user charges on barge operators, water shippers, and the regional economies involved. The study concluded that, for the most part, full cost recovery would not have damaging effects.

Daylight Savings Time

The House and Senate Commerce Committees called on the Department to present the Administration's position on legislative proposals to extend the six-month daylight saving time period to seven or eight months. New revised analyses were conducted to update the findings of the Department's 1975 report to Congress relative to the impact of extending daylight saving time on energy consumption, traffic safety, crime rates, and public opinion. These findings significantly strengthened support for the Administration's position, which recommended expansion of daylight saving time to extend from the first Sunday in March to the last Sunday in October. A bill subsequently passed the House, in September 1981, to extend the system to the dates recommended by the Department. Action was pending in the Senate.

Environmental Protection

The Department completed a study of the environmental regulations which apply to transportation projects. The study identified several key areas in which the requirements are duplicative or unduly time-consuming without significantly adding to environmental protection. The Secretary submitted a report on the study—with recommended improvements—to the task force on regulatory relief.

Transportation for the Handicapped

On July 20, 1981, the Department issued an interim final regulation amending the mass transit requirements of the Department's regulation on nondiscrimination against handicapped persons (Section 504 of the Rehabilitation Act of 1973). The previous rule imposed significant costs on the transit industry and had been opposed by the vast majority of transit operators and some handicapped persons. The new regulation provided local communities greater flexibility to determine how to apply transit funds to provide transportation for handicapped persons.

Air Quality Control

The Department completed a study of the costs and relative effectiveness of transportation strategies to reduce air pollution. The report compared various transportation control measures and suggested strategies for analyzing local conditions to reduce the cost of improving air quality. The Secretary provided a report on the studies findings to the Environmental Protection Agency Administrator for use in developing amendments to the Clean Air Act. Copies were also made available to state and local air quality and transportation agencies.

BEST COPY AVAILABLE

Legal Assistance

During the year, the Office of the Secretary offered a wide range of legal assistance:

- Provided legal analyses and opinions to the Cabinet level task force, chaired by the Secretary of Transportation, on issues dealing with international trade, taxes, and antitrust questions for the President's program for the auto industry.
- Provided legal representation to major international air transportation negotiations, including bilateral consultations with Japan and multilateral consultations with the European Civil Aviation Conference on North Atlantic pricing.
- Prepared legal assistance and advice on the transfer of the Maritime Administration to the Department of Transportation.
- Drafted regulations involving Washington National Airport, minority business enterprises, and access of the handicapped to public transportation, and defended the Secretary from challenges to these regulations.
- Developed and presented Departmental positions on transportation industry issues which involved significant legal questions, such as the Union Pacific-Missouri Pacific railroad merger, railroad and motor carrier deregulation, and airline merger cases.
- Provided legal advice and representation pertaining to the issuance of a license for a deepwater port at Freeport, Texas.
- Provided legal opinions and support regarding the formulation of policy concerning the Chrysler Corporation.
- Implemented the priority review of existing transportation regulations to ensure that the regulations were necessary.
- Provided legal advice and representation to the Law of the Sea Negotiations.
- Reviewed and disposed of 223 cases involving the correction of military records for the U.S. Coast Guard.

Inter-governmental Affairs

Major accomplishments in inter-governmental affairs during the year included coordinating the Department's participation in the Presidential Federalism Advisory Committee and providing an intergovernmental perspective for Departmental working groups and task forces.

The Department contacted major public and special interest groups concerned with transportation, briefed them on Administration goals and objectives, and offered assistance in understanding and providing information to their constituents of the Department's program and budget. The Regional Representatives of the Secretary made similar contacts with state and local officials and Congressional district offices. Many organizations and officials were contacted by the Department for the first time. A concerted effort was made to meet with state and local officials at forums and meetings.

Community Planning Assistance

Major accomplishments in community planning assistance included:

- Initiating a study to assess the impacts of current federal program changes on planning and decision-making at the state, regional, and local levels, and to determine how the Department can help them adapt to new transportation responsibilities.
- Participating in a major review of the Federal Highway Administration and Urban Mass Transportation Administration urban transportation planning process.
- Developing innovative planning studies not fundable by modal programs, including a study of private sector involvement in community contingency planning in Bakersfield, California; a study of improving transportation in a rural area of Northwest Colorado impacted by recreational travel and the coal industry; and participating in a joint Department of Transportation, Department of Housing and Urban Development, and Department of Energy national community energy management center.

Technology Sharing

The Department's technology sharing program responds to over 100,000 requests annually from state and local governments for technical assistance and information on a wide range of technology related topics.

Recognizing the role that such technical assistance can play in helping state and local governments deal with reduced funding levels, the Office of the Secretary issued guidance to the operating administrations on technology sharing activities. Specific emphasis was placed on alternative (non-federal) funding approaches, improving the effectiveness of federal funding where there is an appropriate federal role, and developing partnerships with the private sector.

To encourage better flow and dissemination of information, the technology sharing program put special emphasis on identifying and transferring information on innovative state and local research and transportation activities. This enables similar jurisdictions to take advantage of innovative practices of other jurisdictions.

Consumer Liaison

The Department continued to inform the public and seek public participation in agency decision-making, as required by Executive Order 12160. Specific activities included

BEST COPY AVAILABLE

developing case studies on successful public involvement in local transportation planning; providing information to consumers on the President's transportation proposals; and reviewing significant consumer regulations (e.g., auto safety, accessibility for the handicapped, and examining transportation's role in local economic development.)

Small and Disadvantaged Business

The Department awarded $141 million dollars of procurement contracts to minority business enterprises (MBEs). This represents a six percent increase over our accomplishments in fiscal year 1981.

The Office of Small and Disadvantaged Business established 14 Program Management Centers located in key cities throughout the country. These Centers provide outreach services and technical assistance to the MBEs. These Centers seek out business opportunities for MBEs and assist MBEs in preparing bid packages.

The Office set up a specialized marketing program to increase business opportunities for Native American Business Enterprises.

A National Information Clearinghouse was established to dessiminate business opportunities to over 7,000 MBE/WBE firms.

A specialized marketing program was established to obtain subcontracting opportunities with major corporations doing business with DOT grantees.

A project was funded through the Office of Small and Disadvantaged Business with Amtrak Corporation whereby Amtrak provides short term financial assistance to MBEs seeking to do business with the Corporation.

Ten Historically Black College Programs were funded at a total cost of $794,000.

Administration

The Office of the Secretary initiated and carried out improved management practices that reduced costs and increased the Department's effectiveness and efficiency. For example, implementing the Paperwork Reduction Act of 1980 improved the management of the Department's information resources. The Department's automatic data processing capability was increased by replacing obsolete computers, the Department saved $2.8 million through space reallocation. In addition, several management studies led to improved Departmental management; one study led to improvement in the organization of the Urban Mass Transportation Administration. The Office of the Secretary also managed the transfer of the Maritime Administration to the Department and provided support to the Maritime Administration during the transition.

Cash Management

The Department implemented and fostered improved cash management practices. During the year, grant payment procedures were reviewed to ensure that they were consistent with cash management policies. Time was also devoted to improve letter-of-credit procedures. On implementation, these procedures should improve the Department's cash position by minimizing premature and excessive grant payments. Additionally, the procedures should ensure timely payments to grantees and contractors.

The findings of series of in-house reviews of cash management practices were summarized for Departmental evaluation and for use in providing a required report to the Treasury Department. In addition, specialized reports on specific aspects of cash management were furnished to the Treasury Department and the Office of Management and Budget to assist in their evaluation of government-wide cash management practices.

Guidelines were established on timely payments to improve the Department's image with the business sector, on prompt collection of receivables to improve the Department's cash posture, and on internal controls to protect the Department's cash resources against loss or improper use.

BEST COPY AVAILABLE

United States Coast Guard

The United States Coast Guard is responsible for enforcing or assisting in the enforcement of federal laws on the high seas and waters subject to U.S. jurisdiction. These laws govern navigation, shipping, other maritime operations, and the related protection of life and property. The Coast Guard also provides maritime search and rescue facilities. Other responsibilities include:

- Promoting the safety of merchant vessels.
- Conducting oceanographic research in support of other Coast Guard missions.
- Furnishing ice-breaking services.
- Developing, installing, maintaining, and operating maritime aids to navigation.
- Marine environmental protection and response.

The U.S. Coast Guard must also be ready to function as a part of the U.S. Navy in time of war or national emergency.

The Coast Guard operates a fleet of 246 cutters, 156 aircraft, and more than 2,200 boats. It also maintains approximately 47,000 navigational aids.

Coast Guard missions are carried out by 38,248 military and 5,646 civilian personnel. They are supported by the 12,000-member Coast Guard Reserve and 41,061 civilian volunteers of the Coast Guard Auxiliary.

International Affairs

The Coast Guard's international involvement reflects increasing world focus on maritime resources. Long recognized as a world leader in maritime affairs, the Coast Guard attracts the attention of many nations interested in maritime resource protection or marine safety matters. Foreign governments that want to establish or improve their own maritime and naval forces look to the U.S. Coast Guard as a model. Regular exchanges of information are increasing with sister services in the Bahamas, Iceland, Jamaica, Japan, Liberia, Panama, the Philippines and Venezuela.

In October 1981, the first Caribbean Maritime Symposium was hosted by the U.S. in Florida. Attended by 41 representatives from 15 countries and two international organizations, it focused on maritime search and rescue and on pollution control. Other Caribbean countries will host future biennial symposia.

The number of foreign nationals trained at Coast Guard schools continued to increase in fiscal year 1982, as did foreign information requests. Coast Guard instructors and advisers were sent to Barbados, Haiti, Honduras, Liberia, Morocco and Sierra Leone for temporary duty on a reimbursable basis. Requests also increased to operate Coast Guard cutters with allied navies and to visit foreign ports in the Caribbean, South America and West Africa to promote our national objectives and policies. Coast Guard personnel led U.S. delegations to meetings of technical committees of the International Maritime Organization (former Intergovernmental Maritime Consultative Organization) and actively participated in other international conferences as U.S. delegates and technical experts. Six reimbursable positions involved with international training were established, including Coast Guard Security assistance liaison officers assigned to Jamaica, Liberia, and Panama.

Search and Rescue

Search and Rescue (SAR), the traditional role most associated with the Coast Guard by the public, continued to be a major Coast Guard mission. The SAR program objective is to save lives and prevent personal injury and property damage in the maritime regions of the United States. This program accounts for approximately one-fourth of Coast Guard operating funds and personnel resources.

In 1982, the Coast Guard responded to more than 74,800 calls for assistance. With the aid of the Coast Guard Auxiliary, 5,450 people were rescued from life threatening situations. An additional 158,400 people in varying degrees but less immediate danger were assisted. Value of the property saved was estimated to exceed $1.2 billion.

Significant accomplishments marked the area of international cooperation for search and rescue. In September 1982, a new satellite system, which the Coast Guard helped develop to track and locate distress signals, saved seven lives in SAR cases. The system was developed jointly by the United States, France, Canada and the Soviet Union, to detect distress cases and minimize search efforts around the world. The Coast Guard has strongly supported ratification of the International Conference on Maritime Search and Rescue, which promotes world-wide cooperation in SAR. To this end, in addition to hosting the Caribbean SAR symposium in Florida, the Coast Guard met with Japanese and Philippine officials to develop bilateral SAR agreements.

BEST COPY AVAILABLE

In 1982, the Coast Guard placed greater emphasis on developing the professionalism of its SAR forces. It developed a new boat crew training program and it enhanced the effectiveness and safety of its personnel by significant improvements in survival equipment. These included procuring more effective and easier to use survival suits and de-watering pumps, designing a new aviation life raft, and evaluating and accepting a new survival vest with underwater escape re-breather for helicopter operations. Improvements also were made at the National Search and Rescue School, recognized as a world leader in SAR training.

Drug Interdiction

During 1982, the Coast Guard seized 173 vessels for narcotics trafficking. Nearly 3.5 million pounds of marijuana were seized, the total value of contraband interdicted in excess of $1.6 billion. On February 16, 1982, the Vice President announced the formation of a task force on South Florida crime—a new initiative in maritime law enforcement efforts in the Southeast U.S. and the Caribbean Basin. Before establishing this task force, Coast Guard law enforcement efforts in the area had gradually increased to three full-time cutters, plus a portion of the services of the Haitian migrant interdiction operation cutter. Prior to this increased level of effort, Coast Guard units interdicted an estimated 12-15 percent of the seaborne marijuana bound for the U.S. After the task force was formed and an additional cutter added to the Caribbean area, the interdiction rate was estimated to have increased to about 30 percent.

Aliens and Refugees

In response to a Presidential proclamation on the interdiction of illegal aliens on the high seas, the Coast Guard began a Haitian migrant interdiction operation on October 9, 1981. This was a cooperative effort between the Coast Guard and the Haitian Navy aimed at interdicting narcotics smugglers and those engaging in illegal transportation of undocumented migrants. The program was an unqualified success. During the first full year of operation, it reduced the flow of Haitian migrants to 164, compared to 15,093 in calendar year 1980. In 1982, the Coast Guard interdicted a total of 59 other nationals attempting illegal entry into the U.S. and arrested 1,131 aliens associated with the seizure of narcotics smuggling vessels.

Fisheries Law Enforcement

Coast Guard fishery conservation activities during the year included: conducting 2,063 boardings (1,512 domestic, 551 foreign); issuing 211 citations (62 domestic, 149 foreign); and initiating 186 civil penalty actions. Five foreign vessels were seized. The seizures yielded payments of $1,276,000 in penalties plus the unsold catches. Enforcement of domestic fishing regulations developed by Regional Fishery Management Councils required 55 percent of the Coast Guard's fisheries law enforcement effort. Implementing new fishery management plans on the Atlantic and Gulf Coasts continued to increase the required effort. Foreign fishing was the primary concern in the fishery conservation zone waters off Alaska where over ninety percent of the foreign catch is taken and a major concern in all areas.

In addition to its fisheries management responsibilities, the Coast Guard enforces statutes regarding marine mammals, endangered species, and marine sanctuaries. Conflicts between fishing groups, domestic or foreign, required considerable Coast Guard attention, including intercessions, investigations, and management of fixed gear reporting systems.

Aids to Navigation

Tests of Loran-C radio navigation precise piloting equipment in New York harbor again demonstrated the capability of Loran-C for precision piloting and buoy positioning. Additional precision-tracking experiments were being used to validate the manual for designing visual aids to navigation systems. Work began on a project to relate radar piloting ability to visual aid selection and visual piloting ability. A comprehensive study of the needs of mariners in Tampa Bay was completed and nearly all navigational aid changes were completed. The buoy tender COWSLIP was recommissioned as a replacement for the cutter BLACKTHORN. Aids to navigation teams were reorganized to accommodate a 100-person reduction. Two 175-foot coastal buoy tenders were decommissioned, and four lighthouses were automated.

Conversion of fixed lights to solar photo-voltaic power continued, and a contract was awarded for solar panels. Development continued on a prototype aid control and monitor system to permit completion of the Lighthouse Authorities maritime buoyage system which was adopted by agreement with other nations. Several public meetings were held to explain the buoyage changes.

The installation began on remote operating systems at selected Loran-C stations. These systems will allow substantial reduction in manpower in the Loran-C program. Using precision intracoastal translocator equipment, the high precision navigation capability of Loran-C in harbors and restricted waterways was successfully demonstrated for the U.S. Navy in the Straits of Juan de Fuca and for the St. Lawrence Seaway Development Corporation on the St. Lawrence Seaway. Loran-C grid verification of U.S. coastal waters was completed and the data forwarded to the Defense Mapping Agency for chart updating.

BEST COPY AVAILABLE

With the beginning of operations at Omega station Australia, the Omega navigation system attained its permanent configuration of eight worldwide stations. The Omega area validation program, to determine signal coverage and accuracy parameters continued. The Coast Guard co-sponsored an Omega user workshop to define Omega problems and propose solutions. An operational evaluation of a differential Omega station installed in Puerto Rico was initiated. Extensive modernization of the Coast Guard-operated marine radio beacon system continued, replacing obsolete equipment with solid-state electronics. The Federal Radio Navigation Plan, rewritten by an interagency navigation working group, was published.

Bridges

During 1982, 181 bridge permits and 41 drawbridge regulations were issued. Pursuant to the Truman-Hobbs Act, alterations were completed of the following: the Central Gulf railroad bridge, Illinois River, Pearl, Illinois, and the Southern Pacific railroad bridge, Gulf Intracoastal Waterway, Houma, Louisiana. Alteration of the Alabama State Docks railroad bridge, Three-Mile Creek, Mobile, Alabama, commended. Pursuant to the International Bridge Act of 1977, one bridge permit was issued, for a bridge across the St. Croix River at Vanceboro, Maine.

Commercial Vessel Safety

The Coast Guard instituted the regional examination center concept, consolidating the licensing and documentation of merchant seamen from 49 Marine Inspection and Marine Safety offices to 16 regional centers. This consolidation was expected to provide more efficient administration of the merchant vessel personnel licensing program.

The Coast Guard proposed to liberalize its reporting criteria for marine casualties, since the normal costs of salvage, dry docking, and gas freeing of vessels are not directly related to the severity of a marine casualty. A proposed rulemaking published August 16, 1982, would allow omission of those costs from the $25,000 total damage cost requirement for reporting marine casualties. This action should greatly reduce the number of casualties requiring reports and, together with a newly simplified casualty reporting form, reduce the accident-related paperwork for the maritime community.

The Coast Guard and the American Bureau of Shipping (ABS) signed a Memorandum of Understanding concerning plan review and inspection for new vessel construction. The memorandum broadened Coast Guard acceptance of ABS plan review and inspection. Areas of inspection and plan review that ABS could perform for the Coast Guard included the hull structures of conventional ships and barges, inert gas systems, crude oil washing systems, and most routine electrical and piping system.

The Coast Guard revised the Electrical Engineering Regulations for U.S. Shipbuilding, updating the regulations and incorporating International Maritime Organization recommendations. The new regulations incorporated many existing standards used voluntarily throughout the industry, resulting in lower shipbuilding costs and a 40 percent reduction in the volume of regulations.

The Coast Guard also:

- Issued final regulations on May 20, 1982, requiring that pressure vessels not containing hazardous materials be designed, inspected, and stamped in accordance with the American Society of Mechanical Engineers' Boiler and Pressure Vessel Code.
- Published regulations implementing the Vessel Documentation Act of 1980.
- Published recommendations on control of excessive noise to allow more flexibility in complying with regulations.
- Published a final rule entitled "Safety Rules for Self-Propelled Vessels Carrying Hazardous Liquid."
- Completed, in cooperation with the International Maritime Organization's subcommittee on bulk chemicals, the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk and the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk.
- Was active in the development of a U.S. capability to burn hazardous wastes on dedicated incinerator ships. Conceptual design review was completed for two incinerator ships which were to operate out of New York and would relieve the northeastern part of the United States of some of its hazardous waste disposal problems.
- Published regulations implementing the Tonnage Measurement Simplification Act, Public Law 96-594. These regulations provide for determination of tonnage measurement for small vessels operating domestically through a mail-in procedure using simple forms to report vessel data. The tonnage then can be calculated rapidly using a simple formula. The process reduces cost and delay.
- By a Memorandum of Understanding, delegated its authority to measure vessels and issue tonnage certificates to the American Bureau of Shipping.
- Received approval from Congress of the International Convention on Tonnage Measurement of Ships which, when implemented, will simplify measurement of larger vessels and establish uniform standards throughout the world maritime community.

BEST COPY AVAILABLE

• In response to P.L. 96-320, the Ocean Thermal Energy Conversion Act of 1980, published a Notice of Proposed Rulemaking (46 FR 49078, October 5, 1981) proposing rules for ocean thermal energy conversion facilities and plant ships, to protect the marine environment and promote the safety of life and property at sea.

• Published a Navigation and Vessel Inspection circular on Stability Tests; Waiver of "Sister Vessels," which established a procedure whereby the Coast Guard would accept a letter by an officer of the shipbuilding company certifying that two vessels were built to the same set of plans in lieu of requiring a stability test on the second vessel.

Recreational Boating Safety

The Coast Guard continued its efforts to reduce the rate of fatality, injury, and property damage among the estimated 15 million boats and 64 million people who go boating annually. The recreational boating fatality rate continued to decrease in response to the benefits of past safety actions.

The Coast Guard continued to encourage state governments to assume greater responsibility for boating safety through the development and enforcement of consistent regulations supplemented by education and accident-recovery programs. State and local governments were called upon to assume most water boating safety law enforcement functions while federal resources were applied elsewhere. American Samoa assumed its boat numbering responsibilities, and efforts continued to encourage the remaining three states (New Hampshire, Alaska and Washington) to assume their numbering responsibilities.

Some 500,000 boats are produced each year by an estimated 2,500 manufacturers. In 1982, the Coast Guard monitored 202 recall campaigns by manufacturers to correct potential hazards or to modify boats failing to comply with applicable federal safety standards. These campaigns affected 48,220 boats. Preliminary tests conducted by an independent facility under contract to the Coast Guard indicated that 57 of 131 models of production boats tested failed to meet one or more of the applicable federal standards.

The boating safety program was aided greatly by the support of the Coast Guard Auxiliary. During the year Auxiliary members, who are private citizens, conducted safety courses for over 527,000 people and made courtesy examinations of over 315,000 boats. The Auxiliary was credited with saving 1,478 lives and assisting more than 53,000 people.

Marine Environmental Response Program

The most extensive change in the history of the National Oil and Hazardous Substances Contingency Plan was published July 16, 1982. This change incorporated the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) relating to response to chemical releases into the environment. Coast Guard input to the new plan was considerable and preserved their responsibilities in the coastal and maritime areas, while ensuring that the Environmental Protection Agency (EPA) retained responsibility in the inland areas and—of particular importance—that the EPA was the principal federal element responding to hazardous waste sites.

Several memoranda of understanding between the Coast Guard and EPA were signed—and others were in preparation—to support Coast Guard responsibilities under CERCLA and the revised national contingency plan. The memoranda prescribed Coast Guard mission responsibilities for hazardous substance incident investigation, response, and clean up.

Waterways Management Program

Requirements for carriage of automatic radar plotting aids on certain sizes and classes of vessels became effective July 1, 1982, as mandated by the Port and Tanker Safety Act of 1978.

The Houston/Galveston Navigation Safety Advisory Committee was chartered in September 1982. The committee provides a public forum for consultation and advice on navigation safety in the Houston/Galveston area.

Final regulations concerning tank vessel operations in Puget Sound became effective June 10, 1982. This regulation established a 125,000 dead weight ton (DWT) limit on oil tankers transiting Puget Sound and continues to provide a high level of protection to the marine environment in the Puget Sound area.

Port and Environment Safety Program

On the basis of a provision in the dangerous cargo regulations, the Coast Guard and the National Cargo Bureau (NCB) issued joint directives to field personnel promoting a cooperative enforcement program on vessels loading hazardous materials. The dangerous cargo regulations provided for Coast Guard recognition of NCB certificates as proof of compliance. The NCB is an independent inspecting and certifying authority sponsored by private enterprise. This combined effort was expected to yield more efficient manpower utilization by eliminating duplicate inspections. The Coast Guard retained its compliance responsibilities.

The Coast Guard was called upon to assist in security precautions during the arrival of the USS OHIO, the first U.S. Trident submarine, at its new home port of Bangor, Washington, on August 12, 1982. To protect both the submarine and some 10,000 protesters, the Coast Guard

BEST COPY AVAILABLE

established two security zones, one around the USS OHIO and another along its route. Ten Coast Guard patrol craft escorted the USS OHIO, keeping the protesters at a safe distance.

To protect Coast Guard inspectors from low level radioactive cargo, the Coast Guard initiated a program to monitor radiological material. An ad hoc Radiological Health Committee worked with the Nuclear Regulatory Commission to assess the danger and develop protective measures.

The Coast Guard initiated cost-benefit review of marine sanitation device (MSD) regulations. The regulations were based on the standards for MSD performance developed by the Environmental Protection Agency. Some 500 comments were received during the public comment period.

Coast Guard personnel conducted 54,000 cargo vessel and barge boardings and 41,600 waterfront facility inspections, devoted almost 60,000 hours to harbor patrols, conducted over 9,000 pollution investigations, and monitored over 10,000 petroleum cargo transfer operations in support of port safety and environmental protection.

Fund balances as of September 30, 1982, were: $1.7 million in the deepwater port liability fund; $27.2 million in the offshore oil pollution compensation fund; and $24 million in the pollution clean-up fund. The Coast Guard was well prepared, under existing law, to respond to oil spills and provide clean up services and, in the case of outer continental shelf or deepwater port incidents, to settle third party damages.

Marine Science and Ice Operations

Polar ice breakers successfully completed scientific and logistic missions in the western Arctic, in Greenland waters, and in the Antarctic. Domestic ice-breaking was conducted in the Great Lakes and along the northeastern U.S. coast. The most significant program changes involved marine sciences activities, including dis-establishment of the Oceanographic Unit and assigning the oceanographic cutter EVERGREEN to other duties. The Coast Guard continued to support Marine science via the international ice patrol, national data buoy support, and various cooperative programs.

Coast Guard User Fees

In May 1982, a legislative proposal authorizing user fee charges for certain Coast Guard services was forwarded to Congress. The proposal had been developed following a series of public meetings and consultations with interested user groups. Although the legislative proposal was not actually introduced, hearings were held in June 1982 by the Subcommittee on Coast Guard and Navigation of the House Committee on Merchant Marine and Fisheries. Testimony presented at the hearings by representatives of the user groups indicated a strong resistance to the proposal as presented.

Cutter Construction, Design, and Maintenance

Construction continued on the 270-foot famous class cutter. The third and fourth cutters of the class (HARRIET LANE and NORTHLAND) were launched at Tacoma Boat Building Company. Keels for the fifth and sixth cutters (SPENCER and SENECA) were laid at R.E. Derecktor, Inc., of Rhode Island. Tacoma Boat Building Company was building the first four ships of the class, and R.E. Derecktor of Rhode Island was building the last nine. Delivery of the first cutter was expected in January 1983. A contract to build a 140-foot ice-breaking tug to serve as the replacement for the cutter CUYAHOGA was awarded via the Small Business Administration's set aside program.

Shore Construction

Inventories of the marine environmental response equipment of the national strike force were augmented by the completion of skimming barrier system deliveries. The skimming barrier system provides the best known capability for large scale spill clean up in open water. Also, acquisition continued for replacement prime mover units for the air deliverable anti-pollution transfer system. These versatile hydraulic power units are used by the national strike force to power a wide range of emergency response equipment. Increased emphasis was placed on equipment readiness, with a more formalized preventive maintenance system implemented for most strike force hardware.

Major shore projects completed included renovating McAllister Hall at the Coast Guard Academy; various replacement facilities at Galveston, Texas; a community services building at Portsmouth, Virginia; a water treatment plant at Kodiak, Alaska; and a waterfront at Cape Disappointment, Washington.

Aircraft Procurement and Improvement

In mid-September 1982, Aerospatiale Helicopter Corporation advised the Coast Guard that it could not deliver the new short range recovery helicopter (HH-65A) by September 30, 1982. The Coast Guard entered contract modification negotiations with the position that a helicopter unable to meet contract specifications was unacceptable. Delivery of the first operational aircraft was anticipated in October 1983.

An aircraft program office was established at Marietta, Georgia, for procuring replacement long range search

BEST COPY AVAILABLE

(HC-130) aircraft. Five aircraft were funded in fiscal year 1982. Delivery of these aircraft was expected in July 1983.

Implementation of the new medium range search (HU-25A) aircraft began in April 1982. Twenty fully certified aircraft were accepted, with implementation complete at Aviation Training Center Mobile and in process at Air Stations Miami and Cape Cod.

The HH-3F helicopter fleet was retrofitted with a newly designed tail rotor blade. This project was initiated when an HH-3F experienced fatigue failure of a blade in December 1981.

Two AN/APS-135 side-looking airborne radar systems, manufactured by Motorola, Inc., were installed in C-130 aircraft. This high-resolution, wide-area (80 nautical miles), surveillance sensor has applications in ice operations, search and rescue, law enforcement, and marine environmental protection.

Research and Development

Several promising Coast Guard research and development projects focused on improving search and rescue procedures and equipment. Continued operational evaluation of the forward-looking infrared sensor gave further confidence that it would serve as a night and all-weather search and rescue aid. The Coast Guard participated in an international project with other nations to evaluate SARSAT, the search and rescue satellite. The system which monitors emergency locator beacons, was used successfully by Canada to locate a downed aircraft. Improved search from surface vessels using electronic and visual methods was the product of other efforts. The evaluations of advanced marine vehicles and command and control were two major projects with multi-mission application. Both projects were "systems engineering" approaches to balance resources and other constraints with mission needs from a Coast Guard-wide perspective. The advanced marine vehicles project tested and evaluated hydrofoils, surface effect ships, and other advanced concepts as alternatives to conventional Coast Guard craft. The command and control project hoped to gain considerable knowledge about command and control systems and hardware from a newly-established "test bed" at Group Hampton Roads.

A variety of projects for improved marine environmental response were undertaken during the year. SCOOP oil recovery system tank tests were successfully completed. Various efforts looked at the complex problems of responding to hazardous chemical spills and Arctic oil spills. In related efforts, progress was made toward development of the AIREYE sensor system (for detection of oil and hazardous substances) and protective clothing and equipment for hazardous chemical response teams.

Efforts continued on the assessment and demonstration of all-weather precision radio navigation systems. Survey techniques for precision Loran-C were further refined and successfully applied to surveys at three locations. Receiver equipment was tested and evaluated for both Loran-C and the satellite-based NAVSTAR global positioning system. The short-range navigation aids design guide, leading to more efficient and effective use of short range aids, was completed.

Coast Guard Reserve

Authorized selected reserve strength increased from 11,700 to 12,000, allowing the Coast Guard to reduce the shortage of selected reservists as compared with the early response mobilization requirement for 15,500. Management initiatives along with reductions in critical skill shortages resulted in an almost 10 percent improvement in the quality and quantity of advance orders to mobilization assignments.

Continuing its emphasis on mobilization readiness, the reserve program raised mobilization exercise participation levels close to the 25 percent standard established the previous year. Especially noteworthy was the participation by Coast Guard reservists in inter-service exercises such as REFORGER, the U.S. Army's major exercise to provide reinforcement of forces in Europe.

The program of achieving mobilization training through augmentation of active service missions continued. Of special note were responses to severe flooding along the Illinois River, securing the Port of Seattle, Washington, for the arrival of the first Trident-class nuclear submarine USS OHIO, and provision of waterside security patrols for launches of the space shuttle.

Military Readiness

The Coast Guard represents a significant force dedicated to the tasks of sea control and security of our ports and harbors during military deployments. The Coast Guard continued its participation in the Defense Department's command post exercise program and the worldwide military command and control system. In addition, 50 Coast Guard cutters underwent refresher training at Navy training facilities, and 13 Coast Guard high endurance cutters engaged in joint operations with other naval forces during fleet exercises. The highlight of the year's joint operation was Coast Guard participation in REFORGER and UNITAS XXIII.

Increased use of simulators was planned to improve professionalism, maintain a high state of readiness, and reduce training cost. Simulators for the 41-foot utility boat were scheduled for delivery in January 1983. A simulator for the new 270-foot medium endurance cutters' command, display and control system was under development.

BEST COPY AVAILABLE

Officer Performance Management System

On January 1, 1982, the Coast Guard implemented a new appraisal system for the officer corps, combining individual performance evaluation with officer development. Initial results indicate that the officer performance management system provides users with improved information on which to base personnel decisions. Additionally, the increased communications and planning skills fostered by the system between supervisor and subordinate should improve the efficiency and effectiveness of many units. The Coast Guard was closely monitoring the system. One aspect of the monitoring was providing feedback to raters, on an individual basis, regarding their own marking habits and their skill in writing evaluations.

Personnel Assignment Management Information System

A personnel assignment management information system was implemented to automate the personnel assignment processes. The system should greatly assist assignment officers by providing a quicker match of specific job requirements to eligible service members. The system was also designed to streamline the process of issuing transfer orders.

Minority Officer Recruiting

Minority officer recruiting was still below desired goals. Maximum emphasis was placed on this program, including targeted advertising and goal oriented use of resources. Under the enlisted college student program, now in its second year, college juniors enter the regular Coast Guard, attend recruit training during the summer between the junior and senior years, and attend officer candidate school after receiving a degree. Six people, all minorities, were in the program by the end of fiscal year 1982.

Civil Rights

Military. Continued emphasis was placed on resolving complaints via the military chain-of-command and emphasizing a "home ownership" of the civil rights program at the district and unit level. This was especially important in light of the 54.5 percent reduction in military civil rights billets imposed during the third quarter due to budgetary constraints.

To use the remaining billets effectively, a civil rights program reorganization plan was proposed and approved by the Commandant. Under the reorganization, only 9 of 12 districts were to have a dedicated military civil rights billet. Responsibility for major headquarters units would fall to the districts within whose boundaries they were located. Basically, the program remained unchanged, but with fewer personnel.

Two formal complaints of discrimination from a previous fiscal year were resolved and seven formal complaints of discrimination were received. On September 30, 1982, seven active discrimination complaint cases remained. One was at the hearing stage and one was being withdrawn by the complainant.

Civilian. Five in-depth evaluations of civilian equal employment opportunity programs were conducted at districts and headquarters units; and four technical advisory visits were made to other districts. District and unit multi-year (1982-1986) Affirmative Action Program plans were formulated. The civilian program manual was updated to reflect changes in discrimination complaint procedures. At the beginning of the year, there were 25 active discrimination complaints. During the year, 17 additional complaints were filed and 16 were closed, leaving 26 active complaints as of September 30, 1982.

Roles and Missions Study

At the request of the House Appropriations Committee (Report No. 96-1193), a study group was established to review the roles and missions of the Coast Guard. Represented were the Office of the Secretary of Transportation, the Coast Guard, the Department of Defense, and the Office of Management and Budget.

This interdepartmental group completed a comprehensive review of the roles and missions of the Coast Guard in March 1982. A report with 95 recommendations was approved by the Secretary of Transportation, and submitted to Congress April 1, 1982.

The review essentially affirmed both the existing roles and missions of the Coast Guard. Among the more significant recommendations were those on the feasibility of user charges for many Coast Guard services and the delegation of many hands-on inspection activities to third party organizations, to state and local governments and to owners and operators under Coast Guard compliance monitoring.

The recommendations were being implemented over a period of time.

BEST COPY AVAILABLE

Federal Aviation Administration

Administration The Federal Aviation Administration (FAA) is responsible for promoting aviation safety, operating and maintaining a common system of air navigation and air traffic control for both military and civil aviation, and fostering the growth of civil aeronautics at home and abroad.

Aviation Safety

The Safety Record. During calendar 1981, scheduled air carriers operating under Part 121 of the Federal Aviation Regulations enjoyed their second consecutive year without a catastrophic crash—a record unprecedented in U.S. civil aviation history. Only four single-fatality accidents, three of them on the ground, marred a year in which scheduled carriers flew nearly 6.6 million aircraft-hours, for a fatal accident rate of 0.061 per 100,000 aircraft-hours flown. In supplemental and other unscheduled air carrier operations, no fatal accidents occurred in 235,000 aircraft-hours flown.

Commuter airlines saw their fatal accident rate per 100,000 aircraft-hours flown rise from the 1980 all-time low of 0.55 to 0.83. Their overall accident rate, however, dropped from 2.93 in 1980 to an all-time low of 2.59. On demand air taxis had an accident rate of 3.74 and a fatal accident rate of 0.92 per 100,000 aircraft-hours flown—both all-time lows.

Only general aviation flying ran counter to the generally improving trend. Both general aviation accidents and fatalities rose in calendar year 1981, as did the accident rate (10.0 vs. 9.6 in 1980) and the fatal accident rate (1.82 vs. 1.68) per 100,000 aircraft-hours flown.

Certification. During fiscal year 1982, FAA:

• Implemented the aircraft certification directorate system, an expansion of the "lead region" concept instituted during the previous year. The new system assigned full aircraft certification authority to four directorates. The director of the Central Region is to manage the Small Airplane Certification Directorate; the director of the Northwest Mountain Region, the Transport Airplane Certification Directorate; the director of the Southwest Region, the Rotorcraft Certification Directorate; and the director of the New England Region, the Engine and Propeller Certification Directorate.

• Approved the Bell Model 222B helicopter for IFR flight by a single pilot without stabilization equipment. This was the first time a helicopter without stabilization equipment had been approved for IFR operation by a single pilot.

• Certificated, in August 1982, the Boeing 767, a wide-body, 211-passenger, short- to medium-range, two-engine jet. The Agency also continued certification work on three aircraft types due for certification in 1983: the Boeing 757, a narrow-body, 178-passenger, twin-engine jet designed for the short-haul market; the Airbus A-310, a wide-body, 210-passenger, short- to medium-range, two-engine jet; and the Lear Fan 2100, a two-engine business turboprop with a single pusher-type propeller mounted in the tail.

Rulemaking. The fiscal year's rulemaking activities were highlighted by the September 20, 1982, issuance of a notice of proposed rulemaking setting forth a new concept in airline regulation. The concept, known as "Regulation by Objective," would replace FAA existing detailed "how to do it" regulations with broadly stated objectives that the airlines could meet in the most efficient and innovative manner possible, provided safety standards acceptable to FAA are maintained. Under the proposal, those airlines that want to continue to follow the current regulations can do so. Those that want to adopt new and better ways to operate and maintain their aircraft can submit their proposals, with substantiating documentation, to the FAA, which will evaluate the proposals and determine if they provide a level of safety equal to that contained in the present regulations. Regulation by Objective is an attempt to deal with the realities of the airline industry as it operates today, including the economic deregulation of the industry and the fact that many existing "how to" regulations are based on distinctions that no longer exist or are meaningful. Two airline operating regulations (Part 121 for domestic, flag, and supplemental air carriers and commercial operators of large aircraft and Part 135 for commuter airline and air taxi operations) would be combined into one regulation (Part 120) under the proposal.

On September 2, 1982, FAA issued a final rule governing the operation of "ultralights," a new category of vehicles that includes hang gliders and their powered counterparts. The rule defines ultralight vehicles and applies to those unpowered ultralights weighing less than 254 pounds and with a fuel capacity of no more than 5 gallons. While the vehicles are not required to be certificated or registered, ultralight operators are responsible for maintaining separation from other aircraft on a "see and avoid" basis. The operators must also keep clear

BEST COPY AVAILABLE

of clouds and have the surface of the ground in view at all times. Ultralight operations in airport traffic areas, control zones, terminal control areas, and positive controlled airspace would require prior approval of an appropriate FAA facility. Flight over congested areas is banned, as is, with certain exceptions, flight between sunset and sunrise.

Ultralights exceeding the weight and performance limits must meet FAA safety standards for airworthiness certification, and operators must hold airman certificates.

FAA also announced in July 1982 that it would review its regulation requiring airline pilots to retire at age 60. The "Age-60" rule has been in effect since March 1960.

Aviation Medicine. FAA conducted a number of important research programs in aviation medicine during the fiscal year. In one, it examined methods of evaluating pilot judgment. The program was necessitated by the fact that approximately 50 percent of all civil aviation fatalities are related to poor pilot judgment. Embry-Riddle Aeronautical University, under an FAA contract, completed a phase of the program in April 1982. The university developed prototype training manuals for student and private pilots and flight instructors and gave them a limited evaluation. The evaluation concluded that pilots who used the prototype manuals and received the judgment training exhibited better judgment than those who did not.

In other aviation medicine developments, FAA:

- Began a comprehensive review of the standards used in the medical certification of airmen. The review takes into account the latest knowledge in all the medical specialties and relates it to the risks associated with the performance of airman duties. The review pays particular attention to balancing the right of airmen to fly against the risk of certificating medically impaired but otherwise qualified airmen.
- Amended FAA standards and procedures applicable to medical certification as follows:

1. Revised the special discretionary procedures for issuing airman medical certificates to persons with a disqualifying medical condition. The new rule makes it possible for the Federal Air Surgeon to act promptly in individual cases without the need for the complex and time-consuming petitions previously required before requests for exemption could be considered.

2. Revised their medical standards pertaining to persons with coronary heart disease, to eliminate confusion over the meaning of the cardiovascular standards and avoid the possibility of unrestricted certification of individuals who do not meet these standards.

3. Revised the medical standard pertaining to persons with a history of alcoholism to ensure that the standard conforms to the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970.

Civil Aviation Security. Aircraft hijackings increased significantly during fiscal year 1982. During the year, there were 10 U.S. air carrier and 1 U.S. general aviation aircraft hijackings as compared with 5 air carrier and 1 general aviation the year before—an increase of 83 percent. Worldwide, there were 97 significant criminal acts involving civil aviation. This represented a 4 percent increase over the 92 criminal acts recorded in fiscal year 1981. The 97 criminal acts resulted in 20 deaths and 189 injuries. Members of terrorist groups were responsible for 32 of these acts. Of the 97 incidents, 30 occurred in the United States. Other developments during the period included:

- The production of an audiovisual security training aid entitled, "A Common Strategy for Commuter, Air Taxi, and Corporate Aircraft" that was made available at no cost to interested operators.
- The holding of the Third International Civil Aviation Security Conference, in Washington, D.C., in July, which brought together representatives from over 60 countries and focused on aviation hijack/sabotage experience, adequacy of security measures, research in explosives detection, and incident management concepts.
- The finalization of audits under Special FAR 34 permitting compensation for airlines which incurred nonreimbursed costs for screening passengers and their carry-on baggage moving in foreign air transportation during the period July 1976 through September 1978.

Air Navigation and Air Traffic Control

Air Traffic Control Recovery and Revitalization. FAA made significant strides in rebuilding the capacity of the ATC system, which had been severely reduced by the August 1981 strike of the Professional Air Traffic Controllers Organization (PATCO) and the firing of 11,400 striking controllers. The firings had cut FAA's full performance level (FPL) controllers to 3,607 (down from 13,311), its developmental controllers to 592 (down from 3,064), and its controller staff to 777 (down from 900). This depleted force of 4,976, supplemented by approximately 3,000 team supervisors, manned the ATC system during the critical days following the strike. Since that time, FAA has bolstered that force considerably through a variety of means. The FAA Academy placed some 3,000 graduates at FAA center and terminal facilities. Flight service station specialists transferred to centers and towers. Air traffic annuitants were rehired. The Defense Department assigned military controllers to FAA, and flight data specialists—a new job category created after

BEST COPY AVAILABLE

the strike—were hired to handle non-control functions previously performed by controllers. By September 30, 1982, these additions had brought the ATC work force at centers and towers (exclusive of supervisors) to 13,310, up 167 percent from the August 3, 1981, level. Of this total, 5,612 were FPL controllers, 5,815 were developmental controllers, 1,190 were flight data specialists, 546 were controller staff personnel and 147 were military controllers.

When fiscal year 1981 ended, the ATC system was operating at about 70 percent of its pre-strike capacity. By the end of fiscal 1982, with the influx of new personnel and the fine tuning of procedures instituted by the interim operations plan, the system was operating at 90 percent of capacity. Three centers—Atlanta, Miami, and Washington—and four terminals—Las Vegas, Kansas City, Minneapolis, and New York's John F. Kennedy—were operating at or above their pre-strike levels, though, in all cases, flow control procedures remained in effect.

In another strike-related action, FAA on January 21, 1982, began expanding its tower en route control program. The objective was to alleviate the workload on certain air traffic control facilities critically affected by the strike. Under this program, aircraft were permitted to make cross-country instrument flights under the control of radar terminal facilities, without contacting an en route center. As a result, the load on centers hard hit by the strike was lightened. The program was ideal for low-altitude flights of two hours or less between terminal area.

Expected to add to the ATC system efficiency in the near future was the national air route traffic control center resectorization program, begun in November 1981, at the Atlanta ARTCC. The program objective is to increase controller productivity by optimizing the number of center air traffic control sectors through improved airspace design. As a result of this program, FAA was able to devise the means to eliminate 155 of the existing 721 control sectors of the 20 centers in the contiguous 48 states. This reduction, along with numerous center-boundary and sector-design adjustments, will improve the overall efficiency of the air traffic control system.

The National Airspace System Plan. On January 23, 1982, after months of preparation, FAA issued a National Airspace System Plan which laid out what the agency proposed to do to update and modernize its air traffic control and air navigation system in the next two decades. In a public hearing at FAA headquarters the day the plan was released, the FAA Administrator called the plan "a decision document," which "spells out very clearly and in substantial detail how the National Airspace System will evolve over the next two decades as we move into the 21st century." The plan noted—and the Administrator emphasized—that while the existing system for guiding aircraft was the safest and most efficient in the world, it also had its defects. Made up of a mix of technologies, many of them old, it was very expensive to operate and maintain, allowed little room for expansion, and was difficult to adapt to new situations. The system needed restructuring along more modern, efficient lines.

Highlights of the plan:

• *En Route and Terminal Control Systems.* The NAS Plan makes two principal thrusts in revamping the en route and terminal ATC systems: it uses compatible hardware and software elements, and it employs higher levels of automation. The computer used in the ATC system was not expected to prove adequate for handling the projected traffic growth beyond the mid-1980s. Moreover, the existing computer could not accommodate the higher levels of automation being developed to reduce operational costs, enhance safety, and provide fuel-saving routes for airspace users. The plan called for replacing the existing computer in the mid-1980s with a new host computer capable of using existing software. At the same time, FAA would develop new software and new sector suites to replace existing consoles and displays. The sector suites would have their own microprocessors that would generate information for controller displays and also serve as a back-up to the central computer complex. The computers and the sector suites would be used for all radar air traffic control positions, assisting in the merger of en route and terminal functions. In the 1990s, the new computers will provide the capability and informational frame for implementing higher levels of automation to enable more fuel-efficient aircraft routings and assist controllers with flow planning and traffic management.

• *Flight Service System Modernization.* In this ongoing plan, FAA will consolidate its more than 300 flight service stations into a total of 61 automated hubs. The new automated equipment installed at the hubs will provide FAA flight service specialists with rapid retrieval of the information they need to brief general aviation pilots on weather and flight conditions generally. The data will be processed and stored in computers for immediate call-up on television-like displays at the specialists' positions.

• *Ground-to-Air Systems.* The NAS Plan envisages improving both aircraft surveillance and air-ground communications by implementing a new secondary radar system known as Mode S. Mode S, like the Air Traffic Control Radar Beacon System (ATCRBS) it would replace, obtains information on aircraft by querying transponders in these aircraft, reading out the coded replies, and presenting this data on radar displays. However, Mode S has the additional capability to interrogate aircraft individually, rather than on an "All Call"

BEST COPY AVAILABLE

basis, and thus avoids the interference problems that plague ARCRBS in busy terminal areas.

• *Interfacility Communications Systems.* The NAS Plan calls for an integrated telecommunications network with the potential for use by other elements of the Department of Transportation. It also recommends a mix of owned leased and satellite communications facilities. And it provides that the system must take advantage of rapidly changing and lower-cost technologies in telecommunications. The plan also provides for the establishment of a national airspace data interchange network (NADIN) between 1981 and 1985. The plan says NADIN will evolve into a general purpose, data transmission system with alternative routing capabilities to bypass failed or saturated areas. The system will be designed so it can use whatever transmission medium proves to be most cost effective at the time it evolves.

• *Microwave Landing System.* The plan called for the Agency to begin installing the new microwave landing system (MLS) at airports in 1984 and have more than 1,250 in place by 1998.

In a related development, the Administrator established the Advanced Automation Program Office to carry out the objectives set forth in the National Airspace Plan relating to computer replacement.

In other ATC developments, FAA:

• Established an airport "slot allocation system" for scheduled air carriers to facilitate the carriers' safe and efficient operation within the reduced ATC capacity caused by the PATCO strike. During the fiscal year, the system evolved from a "first in-first out" request for slots by carriers to a priority system based on random draws conducted by FAA. Then, in August 1982, with air traffic capacity running close to 90 percent of the pre-strike level, FAA called in some 200 carriers and let them choose slots from a series of boards listing all available slots. Slot selections were subject to adjustment if individual carriers could demonstrate that they were significantly hurt by the process.

• Established the National Airspace Review Program, a joint FAA-aviation industry venture which allows industry representatives to recommend to FAA changes in the National Airspace System. The first of 69 scheduled working groups started in June 1982. The program will stretch over 42 months and delve into 17 general areas.

• Revoked area high fixed routes within the contiguous 48 States because little or no use was being made of that route structure.

• Selected 10 of the 61 sites required for the automated flight service station hubs.

Airport Programs

FAA's authority to issue airport grants was renewed by the enactment into law of the Airport and Airway Improvement Act on September 3, 1982. The Act, which succeeded the Airport and Airway Development Act of 1970, provides for a six-year authorization of $4.79 billion for airport improvements. For the first year under the new program, fiscal 1982, FAA obligated $405.7 million for 651 new airport planning and development grants and $6.8 million for increases to grants issued in previous years. In addition, $5.1 million was granted for Cannon International Airport in Reno, Nevada, for a noise compatibility project as specifically authorized in the fiscal year 1981 Airport Development Authorization Act.

In the airport certification area, FAA began an in-depth evaluation of the certification requirements and standards imposed by FAR Part 139. One of the primary purposes of the review is to reduce the economic burden the current rule places on operators of small air carrier airports.

International Aviation

FAA participated in 10 major meetings and 15 study and working groups of the International Civil Aviation Organization (ICAO). One of the notable ICAO activities in which FAA participated was the adoption of an annex to the Convention on International Civil Aviation establishing international standards on the packing, handling, and transporting of hazardous materials.

In the area of technical assistance, FAA had full-time resident advisers in Kuwait, Oman, Spain, and Venezuela and sent approximately 40 short-term missions to thirteen other countries. These advisers gave technical advice to these governments on improving their air traffic control system. FAA also provided flight inspection services to 30 foreign countries and trained in the United States more than 400 foreign nationals from 65 countries in air traffic control and aviation safety.

Environmental Protection

In the discharge of its environmental responsibilities, FAA:

• Initiated a long-range rotorcraft noise reduction program, conducted jointly with NASA and the helicopter noise levels and their impact on the public.

• Conducted a program in cooperation with the General Aviation Manufacturers Association (GAMA) to measure the noise levels of general aviation propeller-driven airplanes in a variety of operating modes. The object of the program was to provide a basis for evaluating proposed revisions to the current noise standards for this type of aircraft.

BEST COPY AVAILABLE

• Concluded its High Altitude Pollution Program (HAPP). This program had examined over a period of years the potential effects of high-altitude aircraft emissions on the earth's atmosphere, especially as regards the potential decrease in stratospheric ozone. It concluded that aircraft flights above 50,000 feet had a tendency to deplete atmospheric ozone, while flights below that level served to increase it.

Personnel and Administration

Human Relations.

In late August 1981, following the controller strike, the Secretary of Transportation and the FAA Administrator appointed a three-man task force headed by Lawrence M. Jones, president of the Coleman Company, to study and report on the factors that had created problems between FAA employees and to recommend action that would strengthen future working relationships within the agency.

In a report issued on March 17, 1982, the task force cited a "deteriorating" relationship between people within FAA, particularly among ATC personnel, that went back over several years. To correct this problem, the task force recommended, among other things, that FAA (1) emphasize to its supervisors and managers that the development of human resources that reflects an appropriate concern for employees is an important and necessary activity; (2) develop supervisors and managers with a high level of leadership skills; (3) control the variability in air traffic activity so as to smooth out peaks and valleys and thereby eliminate high pressure periods and periods of idleness for the ATC work force; (4) allow employees to take part in studies, projects, and decisions.

In response to this report, FAA took a number of actions, among them: (1) it established a Human Relations Policy Committee to assist the Administrator in improving human relations within the agency; (2) announced that human relations specialists would be assigned to FAA Headquarters and to the regions and centers; (3) modified the qualification standards for managers to emphasize human relations skills; (4) included in the criteria for rating managers their performance in the human relations area; (5) modified the curriculum of the supervisor's course at the Management Training School to place increased emphasis on human relations skills; and (6) took steps to improve communications between managers and employees.

Labor Relations. After the PATCO strike, FAA filed a petition to decertify PATCO as the exclusive representative of its air traffic controllers. On October 22, 1981, the Federal Labor Relations Authority decertified the union. PATCO's appeal of the FLRA decision was rejected by the U.S. Court of Appeals. By the end of the fiscal year, the Merit Systems Protection Board had heard approximately 2,500 strike-removal cases.

In other labor developments:

• Negotiations between FAA and the National Association of Air Traffic Specialists (NAATS) reached an impasse. Both parties continued to operate under a 1976 labor agreement.

• The Professional Airways Systems Specialists (PASS) was certified as the exclusive representative of FAA's electronic technicians on December 31, 1981. During the year no headway was made in negotiating a labor agreement with PASS.

Civil Rights and Equal Employment Opportunity. In carrying out its civil rights responsibilities, FAA:

• Approved 55 minority business enterprise programs as a condition of assistance under the Airport Development Aid Program.

• Certified 100 FAA employees as discrimination complaints for investigation.

During the fiscal year 1982, the percentage of minorities in the FAA work force dropped from 13.2 percent to 12.3 percent while the percentage of women fell from 15.6 percent to 15.4 percent . The decline in these percentages was an indirect result of the 1981 PATCO strike. FAA employment increased by approximately 4,000 during the fiscal year, rising from 42,590 on September 30, 1981, to 46,649 on September 30, 1982. The bulk of this increase was accounted for by the hiring of replacements for fired controllers. The newly hired controllers were overwhelmingly non-minority males.

Other Personnel and Administrative Developments. Other notable steps taken in this area included:

• Developing, with the academic community, an aviation-related baccalaureate program called the Airway Science Curriculum. The curriculum, specifically designed to prepare college students for employment at FAA and other elements of the aviation community, was circulated to colleges and universities expressing an interest in establishing such a program.

• Enhancing the uniform payroll system by further refinements, including the development of a system documentation, the publication of a payroll office manual, and the improvement of internal payroll controls.

• Adopting improved procedures for the collection of debts.

• Approving three loans with a face value of $20 million under the Aircraft Loan Guarantee Program.

• Leasing nine computer systems to replace computers acquired in the late 1960s. The new systems will afford FAA the capacity for relieving constraints on existing information systems and for undertaking new applications, such as the Uniform Accounting System and the Aviation Safety Analysis System, both of which are scheduled for installation in fiscal year 1983.

BEST COPY AVAILABLE

Federal Highway Administration

The federal-aid highway program is a federally assisted but state administered activity that provides funds to the states for use in construction, reconstruction, and management of the nation's street and highway system.

During fiscal year 1982, federal-aid highway funds obligated totaled $8.1 billion (the full amount made available by Congress), with each state receiving a proportional share.

Federal Highway Administration (FHWA) employment declined by approximately 300 full-time permanent employees during each of the past two fiscal years but FHWA made substantial progress in a number of areas.

Highway Cost Allocation Study

In May 1982, FHWA completed a congressionally mandated report on highway cost allocation which provided a current analysis of how federal highway program costs should be allocated, by vehicle class (automobiles, pickup trucks, vans, trailer combinations, etc.). The study results were expected to figure prominently in future legislative proposals to adjust highway user charges.

The report came at a time when emphasis was shifting from the building of new facilities toward the rehabilitation of existing ones. This shift was reflected in the methods used in the new study. A cost allocation report completed 20 years earlier had assigned costs on the basis of added design features needed to serve each vehicle class on new facilities. The new study used an updated method of that kind, but it also used a separate method which assigned the cost of rehabilitating existing facilities to serve each vehicle class.

The new report included an allocation of costs among the various highway vehicle classes responsible for the costs and an assessment of the current federal user charges, with recommendations on how to make them more equitable.

Among the report's findings and recommendations:

- In 1985, when the current systems of user fees was expected to generate about $7.3 billion, automobiles would pay 100 percent of their cost responsibility; pickups and vans, 110 percent; other single unit trucks, 200 percent; combination (single and double) trailer trucks of less than 70,000 pounds gross weight, 125 percent, and combination trucks over 70,000 pounds gross weight, 65 percent.
- User charges should be graduated more heavily according to truck weight because the greater a truck's weight, the greater its cost responsibility.

While the cost allocation report recommended neither a specific new user charge structure nor a target revenue level, it did present several options which would result in more equitable user fees.

Legislative Initiatives

Since much of the federal-aid highway program is specified through the legislative process, a major effort was made to develop legislative proposals which would permit needed program changes. The Federal-Aid Highway Act signed in December 1981 stressed completion and preservation of the Interstate System as the highest federal priority; but other needed changes awaited future legislative action. The new cost allocation study was expected to figure prominently in future legislative proposals.

Legislation was under development at the end of the fiscal year which, if enacted, would result in:

- Timely completion and preservation of the high priority Interstate System;
- Greater flexibility for the states through consolidation or elimination of certain categorical programs; and
- More adequate and equitable funding of the highway program.

Regulatory Reform

FHWA continued its efforts to reduce costs and improve efficiency by eliminating duplicative reporting and recordkeeping and by increasing the flexibility of the states in complying with highway program requirements.

Construction design criteria. In 1976, Congress raised the definition of "construction" to include resurfacing, restoration, and rehabilitation, thereby clarifying the availability of federal funds for those types of work. However, existing design criteria for federally funded projects have been developed for new construction or reconstruction projects and they were not entirely appropriate for resurfacing, restoration, and rehabilitations projects. As a result, FHWA began to develop separate design criteria for resurfacing, restoration, and rehabilitation projects. The new design criteria, issued in fiscal year 1982:

BEST COPY AVAILABLE

- Encouraged the use of cost effective designs and procedures tailored to individual state or local needs and situations;
- Avoided application of a single national standard in areas where it would not be appropriate, thereby reducing the number of exceptions requiring approval; and
- Provided for adequate federal control through FHWA approval of state-developed design criteria and the use of normal federal-aid review and approval procedures.

Urban Planning Regulations. Federal statutes require a continuing, comprehensive, and cooperative transportation planning process in all urban areas of more than 50,000 population. In August 1982, FHWA published a proposed revision to the urban planning regulations. The revision was designed to ease the burdens imposed on state and local governments by reducing the role of the federal government to the maximum extent allowed by law.

The proposed changes would:

- Simplify administration of the planning process and associated federal funds, especially for urbanized areas under 200,000 population. For example, in smaller urbanized areas a unified planning work program would not be required. Instead, planning tasks could be identified as line items in the highway planning and research program developed by the state.
- Eliminate many current provisions which were advisory in nature and eliminate the requirement for annual FHWA and Urban Mass Transportation Administration endorsement of the transportation plan and transportation improvement program. Endorsement would be necessary only when significant changes to the transportation plan occurred or when a new or revised transportation improvement plan was submitted.

Motor Carrier Safety Regulations. Reviews of existing motor carrier safety regulations resulted in the elimination or modification of several recordkeeping requirements, producing substantial savings for the industry. Accident registers were no longer required of the 200,000 carriers subject to the regulations, a report on temporary seats on buses was eliminated, and proposals to reduce paperwork on driver hour records and vehicle maintenance and inspection records were pending.

Cost Reduction

The cost avoidance, reduction, and efficiency program is designed to reduce internal administrative costs and to foster federal and state activities which result in major cost avoidance or improved efficiency and effectiveness. The program included a variety of cost reduction activities, resulting in savings of nearly $300 million in fiscal year 1982.

Many of the savings were from changes made to state projects after FHWA suggestions or reviews. The use of value engineering and alternative designs, which reduce project costs and provide for optimum use of federal-aid funds, has become a major element of FHWA's cost avoidance activities.

Administrative costs were reduced by redesigning office space, reducing telecommunications and printing costs, and similar actions. Other cost reductions resulted from the introduction of new technology and other innovations.

Interstate System

The Federal-Aid Highway Act of 1981 established early completion and preservation of the interstate system as the highest priority highway programs. To ensure early completion, the legislation reduced the cost to complete the system by nearly $14 billion by limiting eligible construction items to those that provide a minimum level of acceptable service in a safely operating system. The Act further recognized the importance of rehabilitation and preservation of the interstate system by expanding the existing resurfacing, restoration, and rehabilitation program. Work under this expanded program was to be funded at the same federal participation ratio as the construction program, but it could include work which had been made ineligible for interstate construction funding.

At the end of fiscal year 1982, nearly 96 percent of the 42,500 mile interstate system was in use. In rural and urban areas, the percentages in use were 97 and 94 percent, respectively.

A new interstate cost estimate was being completed at the end of the fiscal year. The estimate was to be restricted to the remaining work necessary to complete the interstate system under the redefinition of eligibility provided in the 1981 Act. The Act had reduced the estimated cost of the remaining work to $38.9 billion, but that estimate was based on 1981 costs.

Bridge Replacement and Rehabilitation

The Highway Bridge Replacement and Rehabilitation Program (HBRRP) continued to be successful and popular with the state highway agencies. The overall program consisted of two parts, a discretionary program and a regular program.

Under the discretionary program, the Secretary allocates $200 million per year to critically needed high-cost bridge projects; that is, projects which cost over $10 million or which cost more than twice the state's annual regular bridge program apportionment. The regular program provides annual lump sum apportionments to the states.

BEST COPY AVAILABLE

To be eligible for either type of funding, bridges must have been inspected, evaluated for replacement, and included on the inventory of all bridges on public roads, as mandated by the Surface Transportation Assistance Act of 1978. Criteria for determining eligibility are given in the Highway Bridge Replacement and Rehabilitation Program regulations. At the end of fiscal year 1982, there were 250,000 eligible bridges.

The HBRRP began more than 3,000 projects in 1982 to improve or replace deficient bridges. Fifteen of those projects were new high-cost projects under the discretionary program. High-cost projects are funded on a year-to-year basis.

Pavement Management

Pavement management has grown increasingly important as the nation's pavements approach the end of their service lives and highway agencies are faced with declining revenues, escalating costs, energy and resource conservation needs, and the trend toward increasing axle loads. Pavement management tries to get the best possible return for dollars spent. It is also important to know how much money will be needed in the future in order to retain an acceptable level of service.

To get the best return from the money available, FHWA encourages the identification of projects where the largest payoffs can be secured. FHWA also encourages the thorough assessment and identification of the proper improvements once a roadway has been selected for repair. At the national level, FHWA undertakes training workshops and research and development to help states and local governments acquire the tools and knowledge needed for proper pavement management.

The states have reacted very favorably to this emphasis. They have made efforts to identify their future funding needs and to improve their technical capabilities. In at least 15 states, pavement management efforts have helped to obtain gasoline tax increases.

Cost-Effective Design and Construction

FHWA must ensure that the federal-aid highway program is implemented in the most economical and cost-effective manner. Improved design and construction techniques and procedures contribute to this goal.

Reports on the use of alternative bridge designs indicated that at least 31 state highway agencies were using or had established procedures for using alternative bridge designs in their bid processes. Approximately $22 million in savings were attributed to the use of alternative bridge designs during the fiscal year.

In addition to alternative bridge designs, other alternative designs or procedures resulting in savings were adopted in most regions. The savings realized on the design of geometric features of a particular project were often applied later on a statewide basis. Such practices as reducing design speeds, using alternative interchange designs, reducing median widths, and using less costly guardrail designs were among the common ways in which cost savings were achieved. The most frequently adopted alternative designs and procedures were pavement recycling, value engineering concepts, alternative designs for retaining walls and the use of substitute or waste materials.

Good traffic engineering improves traffic flows, thus reducing fuel consumption, travel time, and vehicle emissions. Improvements in the traffic signals which regulate the flow of traffic in urban areas are the most productive of all transportation improvements in terms of fuel and dollars saved and in terms of savings per dollar expended.

In fiscal year 1982, approximately 1,000 federal-aid traffic improvement projects were authorized for preliminary engineering and 2,770 projects were authorized for construction. Potential fuel savings from 500 of these projects totaled more than 9.2 million gallons per year. Total federal-aid authorizations for traffic improvements in fiscal year 1982 were $1.08 billion, which was a 55 percent increase over fiscal year 1981.

Hazardous Materials Transportation

Increasing transportation of hazardous materials on highways makes it important to identify any motor carriers whose practices and procedures are not in keeping with the safety and welfare of the public.

The number of roadside driver and vehicle examinations performed by FHWA decreased by 10 percent from 40,000 in fiscal year 1981 to 36,000 in fiscal year 1982. The reduction mainly resulted from a reduction in the number of available investigators. On the other hand, the number of safety management audits increased by 17 percent, from 5,125 in fiscal year 1981 to 6,000 in fiscal year 1982. In order to compensate for the reduction in the available safety investigators, a program of aiding states to perform roadside driver and vehicle examinations was instituted.

BEST COPY AVAILABLE

Federal Railroad Administration

In fiscal year 1982, the Federal Railroad Administration (FRA) implemented many of the policy initiatives and legislation introduced in the previous fiscal year. It continued to encourage private sector responsibility for railroad operations and finance and to focus Federal resources on safety. Major accomplishments included:

- Issuing final rules on track safety standards and power brake regulations, based on recommendations developed in FRA-sponsored meetings between rail management and labor.
- Selecting the investment banking firm of Goldman, Sachs and Company to assist in negotiating the Government's sale of Conrail.
- Coordinating the transfer of marginal Conrail lines in New England to privately owned railroads.
- Commencing efforts to arrange the transfer of Conrail's commuter operations to local authorities by January 1, 1983.
- Transferring the responsibility for management of FRA's Transportation Test Center in Pueblo, Colorado, to the Association of American Railroads.
- Working with the Office of the Secretary in developing legislation to end the nationwide railroad strike by the Brotherhood of Locomotive Engineers.
- Co-sponsoring, with the Illinois Central Gulf Railroad, a National Conference on Alcohol and Drug Abuse in the Railroad Industry to discuss Federal regulations and other measures to prevent drug- or alcohol-related incidents on the railroads.
- Directing the track rehabilitation work on the Northeast Corridor.
- Administering a Federal assistance program designed to promote a safe, efficient, and self-sustaining national freight railroad system.
- Focusing FRA's research and development program on the safety of track and equipment.

Safety

Railroad safety is FRA's major mission. The Administration develops and implements programs to achieve safe operating and mechanical practices in the industry. The FRA conducts safety-related research, issues railroad safety regulations and maintains a nationwide force of safety inspectors to enforce those regulations.

The number of reportable railroad accidents decreased by nearly 32 percent—from 8,451 in calendar year 1979 to 5,781 in calendar year 1981. The decrease occurred in every area except casualties involving trespassers and railroad personnel.

FRA and state safety inspectors monitored railroad inspection activities to assure compliance with Federal railroad safety regulations. At the end of fiscal year 1982, there were 280 federal and 88 state inspectors.

FRA completed several rail safety rulemaking projects. It issued the final rules on track safety standards and power brake regulations. The new rules, eliminating or modifying certain costly and controversial rules no longer considered necessary for safety, could lead to annual industry savings of over $100 million. FRA revised state regulations to facilitate greater state participation in rail safety programs. A Notice of Proposed Rulemaking, issued for the blue signal protection of railroad employees, will reduce the recordkeeping requirements. FRA also initiated a general safety inquiry to determine what standards are necessary to ensure the safe construction, maintenance, and operation of rail passenger equipment.

Conrail

The Administration continued its efforts to return the Consolidated Rail Corporation to the private sector, under the provisions of the Northeast Rail Service Act of 1981. By June 1, 1983, the United States Railway Association (USRA) Board of Directors—made up of the USRA Board Chairman and members from the Department of Transportation, the Interstate Commerce Commission, Conrail, and the General Accounting Office—must determine whether or not Conrail will be a profitable carrier. A negative finding means the Government could proceed with selling Conrail either as a single entity or to a number of buyers. An affirmative finding would require the Board to make a retrospective profitability judgment for the period from June 1 through October 31, 1983; if that determination is again affirmative, the Secretary of Transportation must continue to try to sell Conrail as a single entity.

FRA also helped Conrail transfer its marginal lines to other private sector carriers in Rhode Island, Connecticut, and Massachusetts. It also guided Conrail's abandonment or sale of 2,610 miles of uneconomic branchlines and worked with various communities to preserve rail service wherever feasible.

In cooperation with the Urban Mass Transportation Administration, the Northeast Commuter Services

BEST COPY AVAILABLE

Corporation, and State commuter authorities, FRA began the process of transferring Conrail's commuter operations to local authorities by January 1, 1983.

FRA administered two grant-related protection programs utilizing $125.6 million.

Alcohol and Drug Abuse

FRA co-sponsored the 1982 National Conference on Alcohol and Drug Abuse in the Railroad Industry. The conferees learned that Federal regulations may be needed to replace current voluntary measures if solutions are not developed within the industry. A "blue ribbon" committee composed of railroad management and labor was established to recommend to FRA what actions the industry can take to resolve the problem.

Labor-Management Cooperative Program

During fiscal year 1982, the FRA took part in five labor-management cooperative programs, giving technical and financial assistance to projects that will result in more efficient rail service for the public.

Assistance to Railroads

FRA gave a $30 million, low-interest loan to the State of South Dakota to rehabilitate and preserve service on the 482-mile Ortonville, Minnesota-Terry, Montana, rail line purchased by the State from the bankrupt Milwaukee Road. Preservation of the line will ensure the flow of coal by rail from the Knife River coal mine at Gascoyne, North Dakota, to the electric power plant at Big Stone, South Dakota.

Local Rail Service Assistance

A total of $25.9 million was awarded to 46 states to aid in preserving local rail freight service. Thirty-two states and the District of Columbia received $3.1 million to update their State Rail Plans. Thirty-seven states also were granted $22.8 million for improvement projects, including rehabilitation of 690 miles of track and construction projects that will connect shipper facilities now on abandoned lines to facilities on operating rail lines.

BLE Strike

In June 1982, the Brotherhood of Locomotive Engineers (BLE) and the United Transportation Union (UTU) rejected offers of arbitration and announced their intention to call a strike. FRA's assessment of the potential impacts of such a strike was submitted to the Office of the President and became the basis of the President's appointment of an Emergency Board to review the issues and recommend a solution. On September 19, 1982 in a dispute over the Board's recommendations, the BLE struck 116 railroads. During the strike, the FRA staffed a 24-hour telephone center and gathered and disseminated up-to-date information on railroad operations, potential emergency situations and the general impact of the strike. FRA also helped to develop the legislation that ended the four-day walkout.

Regulatory Reform

As the Interstate Commerce Commission pursued a range of proceedings implementing the Staggers Rail Act, FRA assisted in developing the DOT position supporting exemptions from ICC regulation for boxcar traffic and export coal. FRA also participated in the Department's work in ICC proceedings dealing with inflation-based railroad rate increases, coal rate guidelines, and the ICC's studies of joint rate surcharges.

U.S.-Mexico Rail Transportation

The FRA sponsored a series of conferences among railroads and other affected groups which led to measures to include more specific destination information on railroad shipping documents for U.S.-originated freight going to Mexico. Inclusion on the waybill of the name of the Mexican consignee and other related information is expected to improve the efficiency and reliability of processing and handling freight in both countries.

Revisions to the Defense Essential Rail Network (STACNET)

In cooperation with the Department of Defense, FRA completed a review of rail lines and recommended selected revisions in the network of lines previously designated as essential to the national defense. The Defense Department is expected to implement the changes during fiscal year 1983.

Industry Monitoring

FRA continued to assemble and maintain up-to-date statistics on railroad finances and traffic, enabling it to assess developments in the railroad industry, especially as they related to implementation of the Staggers Rail Act, and to the adjustments by the industry to lower traffic levels, a consequence of general economic conditions.

The Northeast Corridor Improvement

Project The $2.19 billion rebuilding project to improve rail service between Washington, D.C., and Boston, Massachusetts, remained on schedule. During fiscal year 1982, three of the four maintenance-of-way bases planned for the project were put into service. The operating facilities are in Providence, Rhode Island, and Perryville and Odenton, Maryland; the last facility in Adams, New Jersey,

BEST COPY AVAILABLE

was under construction. At the Baltimore and Potomac Tunnel in Baltimore, one of two tracks was completely replaced by a new track.

More than $80 million in major construction contracts was awarded in 1982, for work including bridge replacement at the Mystic River and Shaw's Cove, Connecticut; section improvements (drainage, interlocking reconfiguration and curve realignment) in New York, New Jersey, and Pennsylvania; the New Carrollton Station in Maryland; and the Ivy City equipment service facility in Washington, D.C.

A major component of the project is the track work assigned to Amtrak's own labor force, a program now 95 percent complete. Amtrak forces: (1) laid over 70 track miles of concrete ties— using the automated track laying systems; (2) laid 15 miles of continuous welded rail; (5) resurfaced 90 miles of track for high- speed operations; and (6) rehabilitated all or part of numerous interlockings.

The traveling public now is enjoying the benefits of the project. Amtrak offers 2-hour 49-minute Metroliner service on certain express lines between New York and Washington, with a better than 90 percent on-time performance record. In October 1979, Metroliners took 3-hours and 30-minutes to make the same trip and were on schedule less than 40 percent of the time. Service between New York and Boston improved by 50 minutes over the same period. Completion of the project will result in faster trips, improved schedule reliability and safer operations.

Railroad Research and Development

The primary goal of FRA's research and development program is to reduce the frequency and severity of railroad accidents. During 1982, steps toward the goal included:

- Completing selected experiments at the Facility for Accelerated Service Testing (FAST) and conducting a conference to present the combined results of track and mechanical testing achieved during the first six years of operation.
- Continuing research on: track degradation prediction techniques; a covered hopper car with reduced derailment tendencies; an evaluation of the stopping characteristics of various brake shoe materials; a technique to determine the lateral strength of railroad track; the wear and component failure characteristics of radial trucks on freight cars; and a definition of minimum safety specifications, based on track performance requirements.
- Completing an evaluation of the cause of one type of concrete tie cracking in the Northeast Corridor and demonstrating practical remedies.
- Completing test confirming that it is safe for Amtrak to operate F40PH diesel-electric and AEM-7 electric locomotives and Amfleet passenger cars at higher curve speeds than are now permitted by FRA Track Safety Standards.
- Initiating a Government-industry research program, as directed by Congress, to detect defective wheels on railroad cars.
- Completing the first stage of a joint industry, labor, and Government effort to improve the training of locomotive engineers.
- Transferring the responsibility for operating the Transportation Test Center (TTC) in Pueblo, Colorado, to the Association of American Railroads.

Civil Rights

The FRA Civil Rights office stressed the internal Equal Employment Opportunity Program, as well as external compliance programs.

In the Safety Inspector Program, two of seven safety inspector positions formerly held by Caucasian males were filled by minority males and a minority male safety inspector was promoted to supervisory safety inspector.

As a result of the reduction-in-force, total minority representation decreased from 18 to 17 percent. This type of action will continue to be closely monitored.

With respect to the external compliance program, FRA conducted two on-site compliance reviews and 27 desk audits of affirmative action plans and it investigated three complaints.

Early in 1982, FRA and Amtrak awarded $78.3 million in construction contracts to minority-owned companies working on the Northeast Corridor Improvement Project.

The Alaska Railroad

Now in its 60th year, the FRA-operated Alaska Railroad achieved operational highs in fiscal year 1982. The railroad handled 69,506 carloads, a 35 percent increase over 1981. Total freight tonnage moved was 4,502,916 tons, a 34 percent increase over 1981. This resulted in major financial achievements. Revenues were $58.8 million, up 34 percent from the prior year and 12 percent above the previous high reached during the pipeline construction in 1976. Expenses were $29.2 million, an increase of 21 percent. The earned surplus of $9.6 million compared with $3.3 million for fiscal year 1981, a rise of 191 percent. Freight revenues were up 41 percent, passenger revenues increased 31 percent, and other revenues rose by 5 percent.

These accomplishments were the result of aggressive management, increased marketing efforts, budget controls, a favorable Alaskan economy, and major increases in employee productivity. For example, employee produc-

BEST COPY AVAILABLE

tivity in terms of revenue per employee jumped from $67,085 to $84,968, an overall gain of 27 percent.

The Alaska Railroad carried 175,116 passengers, an increase of 9 percent over 1981 and 13,000 persons more than it carried during the previous all-time high in 1953. A key event in the improved passenger service was the $4.24 million modernization of a 10-car train. The Railroad completed 76 miles of high-speed resurfacing, permitting passenger train speeds of 59 miles per hour, a reduction of running time. A revenue/cost ratio of 79 percent was reached, a 16 percent improvement over 1981.

The Administration's legislative proposal to transfer Federal responsibility for operation of the Alaska Railroad to the State of Alaska was introduced in the U.S. Congress in 1981, and legislation was expected to be enacted in fiscal year 1983.

Conrail, USRA and Amtrak—A Special Report

Consolidated Rail Corporation (Conrail). Conrail, under Chairman L. Stanley Crane, continued to use the provisions of the Staggers Act and the Northeast Rail Service Act of 1981 (NERSA) to progress toward self-sufficiency. In 1981, Conrail achieved the first profitable year in its history—generating $39 million in net income (GAAP* basis) and $392 million in cash flow from operations. In the first nine months of calendar year 1982, the railroad posted a GAAP net income of $116 million.

Because of effective cost controls, plant reductions, and wage concessions, Conrail has had no Federal assistance since June 1981. It has abandoned, sold, or transferred 2,940 miles of its 19,000-mile system, under provisions of NERSA. The number of freight employees as of September 1982 was 44,893, or 11,825 fewer than in September 1981, reflecting both the work force reduction program and lower traffic levels. Tonnage carried in the first nine months of calendar year 1982 was 19 percent below the same period in 1981 because of the downturn in the economy.

Conrail is working with commuter authorities and the Northeast Commuter Services Corporation to transfer its commuter responsibilities by January 1, 1983, the deadline set in NERSA. As a result of these measures, Conrail's operating costs in September 1982 were 12.3 percent below those of September 1981.

United States Railroad Association (USRA). The Northeast Rail Service Act revamped the Board of Directors of USRA and modified its mission. Litigation was a major activity immediately following the enactment of NERSA. Three of the four remaining major litigants (Erie Lackawanna, Ann Arbor and Lehigh Valley) settled with the Government in the valuation case between the Government and the bankrupt estates whose properties were conveyed to Conrail in 1976. Only the Central Railroad of New Jersey, now known as Central Jersey Industries, remained in litigation at the end of the fiscal year.

National Railroad Passenger Corporation (Amtrak). Despite fewer passengers, Amtrak improved its financial condition. It achieved a 50.1 percent revenue/cost ratio, up from 42 percent in 1981, and reduced its operating subsidy 12 percent below the $635 million budgeted for 1982.

Amtrak met the standards legislated in the Rail Passenger Service Act, including requirements that the corporation achieve a revenue/cost ratio of at least 50 percent and that it operate services only to the extent of its available resources.

In fiscal year 1982, Amtrak carried more than 19 million passengers and continued to improve its on-time record and control its operating costs. Operating expenses fell below the level incurred in the previous year, due in part to lower inflation rates, improved productivity, and a 7-percent cut in those train services that did not meet congressional criteria for continued operation. Amtrak's 1982 yield from fares, as measured by transportation revenue per passenger-mile, increased by 13.8 percent over the previous year.

---

* Generally Accepted Accounting Practices.

BEST COPY AVAILABLE

National Highway Traffic Safety Administration

The National Highway Traffic Safety Administration (NHTSA) was established by the Highway Safety Act of 1970 as the successor to the National Highway Safety Bureau to carry out safety programs under the National Traffic and Motor Vehicle Safety Act of 1966 and the Highway Safety Act of 1966. NHTSA is responsible for reducing deaths, injuries, and economic losses resulting from traffic accidents. This is accomplished by setting and enforcing safety performance standards for motor vehicles, and through grants to state and local governments to enable them to organize, develop, and implement their highway safety programs more effectively.

NHTSA investigates safety defects in motor vehicles, sets and enforces fuel economy standards, provides assistance to programs in the states and local communities to reduce the threat of drunk drivers, promotes the use of safety belts and child safety seats, and provides consumer information on motor vehicle safety and the comparative crashworthiness of new cars. It also conducts research to demonstrate the relationship between driver skill and behavior and traffic safety, and to develop the most efficient and effective means of bringing about safety improvements.

The Traffic Safety Problem

Drunk driving and the failure of most motorists to use their safety belts are the nation's most serious traffic safety problems.

Although public concern about drunk driving increased significantly during 1982, alcohol continues to be implicated as a contributing factor in at least half of the nation's annual traffic fatalities and injuries.

NHTSA began a major drunk driving awareness program in 1982. In addition, the establishment of the Presidential Commission on Drunk Driving and continued local emphasis by advocacy groups, state and community governments, and police generated considerable public awareness and action in this area.

Similarly, NHTSA undertook a long-term national campaign to urge motorists to use their safety belts. Under NHTSA leadership, industry, local governments, civic organizations and others are working together to increase safety belt usage.

Supporting these national efforts were NHTSA's cooperative state and community traffic safety programs to improve occupant protection and deal with drunk driving, with emphasis on police traffic services, traffic records, and emergency medical services.

NHTSA also stressed the provision of more automotive safety information to consumers. An expanded toll-free "Hotline" telephone service facilitated consumers' obtaining information about motor vehicle recalls, fuel economy ratings, crash test results, tires, bibliographies identifying magazine articles on specific makes and models of cars, the cost of operating various vehicles, and a listing of available NHTSA publications.

Trends

In fiscal year 1982 there were 44,723 traffic fatalities, a continuation of the downward trend that began in 1981.

While reasons for the decline could not be pinpointed, factors believed to contribute to this trend included a reduction in single-vehicle, nighttime and weekend accidents believed to result from increased national awareness of the drunk driving problem and a resolve to do something about it; an absolute reduction in the number of young drivers; increased use of child safety seats and economic factors.

Regulatory Reform Actions

A comprehensive review of NHTSA's safety standards continued to determine what changes could be made to reduce regulatory burdens on the automotive industry without jeopardizing the safety and consumer goals and policies established by the Congress.

As a result, 17 existing or proposed safety regulations were reviewed to determine whether they could be amended without sacrificing safety or other statutory goals. Fourteen were completed by the end of 1982; three were in advanced stages of rulemaking. The completed actions were expected to save consumers nearly $1.5 billion annually and reduce unnecessary industry investments by nearly $900 million.

The most significant were:

- The rescission of that portion of Federal Motor Vehicle Safety Standard No. 208, "Occupant Crash Protection," that would have required that all cars sold in this country be equipped with passive occupant restraint systems.

BEST COPY AVAILABLE

• A final rule modifying the requirements for passenger automobile bumpers. The agency determined that 5 mph bumpers were not offering consumers the least costly bumper alternative and set a new standard of 2.5 mph protection for front and rear bumpers. NHTSA concluded that the new bumper standard would yield an additional $28 in net benefits to consumers over the life of the vehicle. (See also Consumer Activities.)

Motor Vehicle Safety

Crashworthiness. NHTSA continued research on test procedures and vehicle design characteristics to improve crashworthiness, such as methods for testing and evaluating steering assembly and instrument panel crash performance, frontal crash protection in car-to-truck rear underride crashes, pedestrian protection, and side impact protection.

Improved vehicle side impact protection is a key crashworthiness goal because nearly one-third of the fatalities and serious injuries in motor vehicle crashes occur when vehicles are struck on the side. NHTSA has conducted considerable research in this area. It also has conducted tests and simulated crashes to improve the body of knowledge on side impact crashes. The testing included car crashes with dummies, reconstructed and staged car crashes of actual accidents, development of more realistic side impact test dummies, dummy tests with door penetration simulation, and computer modes of side impacts.

Pedestrian impact protection is another priority. NHTSA continued research to resolve questions concerning the Agency's proposed rulemaking on vehicle bumper performance to improve pedestrian protection. This work was expected to establish the degree to which designs meeting the new performance criteria would actually reduce the severity of pedestrian injuries.

The Administration conducted an accident reconstruction study to determine impact conditions that injured pedestrians. Simulated human body parts impacting the vehicle gave improved data on pedestrian impact forces and will allow estimations to be made of the potential benefits obtainable by modifying structures other than the bumper.

NHTSA engineers presented a series of technical papers on crashworthiness subjects to an international panel of automotive experts at the Society of Automotive Engineers International Congress and Exposition. The documents were being used to establish priorities for future government and private efforts to improve motor vehicle crashworthiness.

Automatic Protection. In October 1981, the Agency published a final rule rescinding the automatic protection requirement of FMVSS No. 208, "Occupant Crash Protection." The Agency rescinded the requirement because it no longer met the statutory criteria of being "reasonable," "practicable," and "appropriate," and "meet the need for motor vehicle safety."*

As part of that decision, NHTSA pledged to promote and encourage the automotive industry to develop and market advanced safety technology in automobiles.

Child passenger protection activities involved developing tests and procedures for safety devices designed for 5- to 12-year old children. Children in this age group often are too large for safety seats, too small to use the vehicle's safety belts.

Biomechanics. Biomechanics is the field of study that applies engineering principles and techniques to understand and control impact trauma in humans.

Proposals were received for the design and development of an advanced anthropomorphic test device to advance dummy design by incorporating the most recent frontal and side impact crash characteristics into a single test device.

Making automobiles less hazardous to pedestrians is another area of biomechanical research. NHTSA's proposed pedestrian bumper standard tests will measure the injury reducing potential of soft bumpers, and will also assist in the development of potential injury countermeasures in other vehicle components, such as the hood, hood-edge, cowl, and windshield.

Heavy Vehicles. NHTSA's heavy vehicle research develops and demonstrates approaches to improve truck and bus safety by enhancing their crash avoidance and crashworthiness capabilities.

Crash avoidance research concentrated on developing performance data for improving the stopping capability of both air and hydraulically-braked vehicles without compromising directional stability. A one-year fleet evaluation of the effectiveness of truck splash and spray suppression devices in improving visibility on wet roadways also was completed.

Heavy truck occupant protection research identified the importance of safety belts, improved cab structural integrity to provide occupant survival space and minimize occupant contact with interior surfaces, especially the steering wheel, as the primary measures for reducing the number of truck occupant injuries and fatalities.

Lighting. During 1982, a field study of rear lighting deceleration signals on passenger cars was completed. It was to determine what benefits might accrue in addition to those of the center highmounted stoplamp concept. The results showed no additional benefits.

---

* The recission was subsequently challenged in the courts and, as fiscal year 1982 ended, was pending before the U.S. Supreme Court.

BEST COPY AVAILABLE

Also during this period, further progress in the analysis and field evaluation of improved photometrics for passenger car low beam headlights was accomplished with completion of the work expected in the next fiscal year.

Tires. A notice of proposed rulemaking was issued on July 12, 1982, which proposed to suspend the treadwear portion of the tire quality grading regulation to avoid dissemination of potentially misleading information on the expected treadlife of passenger car tires. The treadwear test results vary to such a degree that the data was misleading consumers about the relative performance of tires. Moreover, the regulation could not be enforced in its existing form. The proposal left unchanged grading requirements for traction and temperature resistance.

A public hearing was held on August 12, 1982, to give the public and the tire industry an opportunity to comment on the proposed change.

Harmonization of Safety Regulation. If the motor vehicle safety requirements of exporting nations can be harmonized without reducing safety benefits, international trade can be simplified. Initial harmonization activities have concentrated on passenger car requirements for hydraulic braking, lighting, controls, and displays.

NHTSA proposed changes to Federal Motor Vehicle Safety Standard No. 101, "Controls and Displays," to allow international symbols, and to make other minor changes in these requirements to promote harmonization.

Highway Safety

NHTSA began a program to increase safety belt and child safety seat usage and provided states and communities with leadership and technical assistance to reduce the drunk driving problem. Traffic records, police traffic services, and emergency medical services were also emphasized.

Occupant Protection. Safety belts have the greatest potential for an immediate and dramatic reduction in deaths and injuries resulting from automobile crashes. Despite their availability in nearly every passenger car in the country and their well-documented effectiveness when worn, only about 11.3 percent of motorists used them at the end of fiscal year 1982.

NHTSA began the most comprehensive public education campaign on safety belts that has ever been attempted. Inaugurated by the President at a White House ceremony, the National Safety Belt Awareness Campaign combines the abilities of many social, civic, professional and employer organizations to disseminate information and influence constituent groups to use safety belts and child safety seats.

Agency specialists worked with influential groups around the country to explain the program and to provide assistance and direction to organizations interested in becoming part of a national network to encourage safety belt use.

Interest in child safety seats has grown dramatically in recent years. Twenty states had child safety seat laws at the end of the fiscal year and many other states were considering legislation. Even in those states without laws, child safety seat loaner programs were increasing in popularity, enabling parents who cannot afford to purchase a child safety seat to borrow one.

The percentage of State Highway Safety Grant Funds obligated to safety belt and child safety seat programs increased to 4 percent of total obligations, increasing from the 3 percent obligated last year.

Alcohol. Drunk driving continues to be one of the nation's most serious public health and safety problems. One quarter of a million Americans have lost their lives in alcohol-related crashes in the last decade, and estimates of the annual economic cost of drunk driving have run as high as $25 billion.

NHTSA estimates that 55 percent of all drivers killed each year have blood alcohol concentrations in excess of the 0.10 percent legal limit. In single vehicle crashes, where it is more certain who is at fault, upwards of 65 percent of the fatally injured drivers are legally drunk.

In 1982, NHTSA worked with states and communities to implement comprehensive and effective state and local alcohol countermeasure programs. During that period, 378 bills were introduced in 37 states; of these, 38 bills passed in 21 state legislatures.

NHTSA also provided citizen groups with a new manual, *How to Save Lives and Reduce Injuries: A Citizen Activist Guide to Effectively Fight Drunk Driving.* The manual lists various methods for a community-wide campaign against the drunk driver.

A Presidential Commission on Drunk Driving was appointed in April 1982, to provide visibility to the problem and recommend to the nation a number of steps to eliminate drunk driving. Composed of concerned citizens and professionals from a variety of disciplines, the Commission consulted with governors, state legislators, the law enforcement community, judges, prosecutors, citizens organizations, the news media, and others to help identify local problems and encourage the action necessary to resolve them. In addition, hearings were held around the country to encourage public participation in finding effective solutions to the drunk driving problem. An interim report to the President was submitted in December 1982.

Traffic Records. An efficient electronic records system, containing the files on drivers, registered vehicles, accident information, and roadway inventories is an important part of a state highway safety program. Traffic

BEST COPY AVAILABLE

records help to identify safety problems accurately and to evaluate the effectiveness of programs to deal with them.

NHTSA assisted the states in the development and implementation of the Accident Data Improvement Plan, a joint NHTSA-Federal Highway Administration project begun in 1978 to improve the quality of state accident data. As a result, the number of states collecting complete alcohol data at the scene of the accident rose from 23 to 30, and 46 states were collecting recommended safety belt data, compared with 41 previously.

The National Driver Register is a central, computerized index of state reports on drivers whose privileges have been denied, suspended, or revoked. Applications for drivers licenses are routinely checked against the Register to determine the applicant's driving history in other jurisdictions.

The manner in which the National Driver Register has operated for the past 20 years will be changed dramatically as the result of the National Driver Register Act of 1982. The new law will speed up the identification and removal of drivers with suspended and revoked licenses who attempt to obtain additional licenses in other states. The legislation calls for the development of on-line computer access capability so that state licensing agencies can use the Register computer to exchange information with other states.

Police Traffic Services. Ninety percent of all motor vehicle crashes involve traffic law violations. NHTSA encouraged states to implement management improvements with emphasis on selective enforcement of driving while intoxicated, speeding, and other unsafe moving violations, and promoted the increased voluntary use of safety belts. Specific activities included technology transfer seminars on NHTSA priority programs for state law enforcement administrators and police officials; the completion (in cooperation with the National Bureau of Standards) of model specifications for police traffic radar and development of a complete model police traffic radar operators training course; and assistance to the National Commission on Accreditation for Law Enforcement Agencies and associated organizations in the development of model accreditation standards for police traffic services.

Emergency Medical Services. Prompt, appropriate prehospital emergency medical care could have prevented an estimated 25 percent of the 1982 traffic fatalities. Currently, less than 32 percent of traffic injuries that require hospital treatment receive an Emergency Medical Services (EMS) response.

NHTSA assisted the states in maintaining, improving and expanding their EMS coverage by publication of improved training guidelines for emergency vehicle dispatchers and other prehospital care personnel. Progress was made in the installation of additional communication systems to improve the coordination of public safety services response to traffic accidents. Improved management guidelines are being developed for emergency medical ambulance services to foster their expansion to rural areas and to increase the percentage of traffic injury victims who receive emergency medical services.

Economic and impact evaluations of EMS systems in several states indicate that the value of their benefits far exceed their costs. In one state, the evaluation indicated that the annual enhancement of income tax revenue resulting from lives saved and reduced medical costs exceeded the annual combined federal and state funding contributions to the EMS system.

In addition to encouraging the development of conventional civilian EMS systems, NHTSA provided leadership to the Military Assistance to Safety and Traffic (MAST) program which uses available U.S. military aeromedical units and aircraft to respond to medical emergencies. MAST personnel at the 31 existing sites across the country flew 2,089 highway accident rescue missions, of which 1,927 required transport of emergency patients.

55 mph Speed Limit. Under the provisions of the Federal-aid Highway Amendments of 1974, each state is required to certify to the Secretary of Transportation, before January 1 of each year, that it has established and is enforcing a 55 mph maximum speed limit on all public highways in the state. Federal-aid highway projects cannot be approved for any state which fails to comply with these provisions.

Subsequent Federal statutes (the Surface Transportation Assistance Act of 1978, the Omnibus Budget Reconciliation Act of 1981, and the Surface Transportation Assistance Act of 1982), provided additional Federal-aid highway funding sanctions for states which fail to achieve at least 50 percent compliance with the 55 mph speed limit. In addition, Congress directed that $20 million in NHTSA Safety Grants (402) funds be used exclusively for enforcement of the 55 mph speed limit.

During 1982, all states continued to conduct 55 mph enforcement programs. However, enforcement levels and penalties assessed for 55 mph speed limit violations varied from state to state. Again in 1982, legislation to raise the speed limit was introduced in some state legislatures, especially in western states, but no state approved such legislation. However, efforts to reduce the penalty for 55 mph speed limit violations were successful in several western states.

Consumer Activities

Bumpers. In May 1982, NHTSA issued a final rule modifying the bumper standard. Effective July 1982, bumpers must protect an automobile in low speed impact crashes

BEST COPY AVAILABLE

up to 2.5 miles per hour, front and rear. The previous standard required 5 miles per hour protection, front and rear.

NHTSA took this action after concluding that 5 mph bumpers did not meet the statutory requirement of the Motor Vehicle Information and Cost Savings Act that such a standard "seek to obtain the maximum feasible reduction of costs to the public and to the consumer."

New Car Assessment Program. The New Car Assessment Program was established under the authority of Title II of the Motor Vehicle Information and Cost Savings Act which requires DOT to publish comparative information on new cars by make and model in three areas: crashworthiness, damageability, and ease of diagnosing and repairing electrical and mechanical systems.

The program has not only increased consumer awareness of differences in the crashworthiness of new cars, but also encouraged some manufacturers to improve the crash performance of their cars.

In the frontal tests, cars are crashed at 35 mph into a fixed rigid barrier, each car carrying in the front seating positions two instrumented adult dummies wearing both lap and shoulder belts. The tests measure the severity of impact to the head, chest, and thighs of each dummy.

During 1982, the Agency began repeatability testing to determine the consistency of the 35 mph test procedures. The repeatability testing involves crashing a series of identical cars and evaluating the injury data.

Defect Investigations/Recalls

There were 137 safety recall campaigns involving 2.6 million vehicles. Twenty-one of the campaigns, involving approximately 1.5 million motor vehicles, were influenced by NHTSA. In addition, 980,000 units of motor vehicle equipment and 157,000 tires were recalled.

Honda Undercarriage Corrosion. NHTSA influenced the voluntary recall of 936,774 model years 1973 through 1979 Honda automobiles for excessive corrosion of undercarriage components, failure of which could lead to loss of control of the vehicle. Vehicles were to be treated with a rust preventive compound and unserviceable components will be replaced.

Ford Motor Company Subcompact Vehicles. Ford voluntarily recalled 113,00 model year 1982 Ford Escort and EXP, and Mercury Lynx and LN7 vehicles to replace a resistor in the heater/air conditioner system. The defect could cause the blower unit to overheat and possibly catch fire.

1982 General Motors Diesels. General Motors voluntarily recalled about 80,000 full-sized diesel passenger cars to replace a part on the fuel injector pump. Failure of this part could cause the throttle to stick open and the operator to lose control of the vehicle.

Holland Hitch Fifth Wheels. NHTSA influenced the voluntary recall of 350,000 fifth wheel assemblies, a device which connects the tractor to the trailer on large trucks. Cracks developed on a support leg of this assembly which could eventually lead to a separation of the tractor from the trailer. Cracks were to be welded and assemblies reinforced.

1979-81 Datsun 510's. NHTSA influenced the voluntary recall of approximately 120,000 vehicles to inspect the front safety belt retractors. Defective retractors could become jammed and hold the safety belts in the retractor.

1979-80 Datsun 310's. A NHTSA investigation influenced the voluntary recall of more than 70,000 vehicles to replace the rear lamp wiring harness. Defective bulb sockets on these harnesses could lead to inoperative stop and tail lamps.

1978-82 Audi 5000's. NHTSA influenced the voluntary recall of 92,000 vehicles for a throttle sticking problem. A vibration damper on the accelerator pedal could catch on the floor mat and prevent the throttle from closing. A plastic protective device was added to the accelerator pedal to prevent the problem.

1982 General Motors "A", "J", and "X" Passenger Cars. General Motors voluntarily recalled 520,000 vehicles to replace the hose clamps on the fuel filler pipe and the fuel filler vent pipe. These clamps could fracture and allow fuel leakage during refueling or while driving when the tank is more than ¾ full.

Compliance Testing

NHTSA tested 178 vehicles for 286 performance requirements related to 14 federal safety standards and regulations. In addition, 3,812 tires and 1,553 equipment items, including safety belts, lighting, and brake hoses were subjected to performance tests related to eight safety standards and regulations. The 1982 testing resulted in 1.2 percent tire failures and 5.4 percent of other equipment failures.

Thirty-four vehicles were tested to determine compliance with Federal Motor Vehicle Safety Standard No. 210, "Seat Belt Assembly Anchorages." Investigations were opened on 1982 model Ford EXP's and Chevrolet Camaro's, which failed to meet the requirements. As a result, 172,863 Camaros and related Pontiac Firebird models were recalled.

The first standards enforcement program was conducted on the new dynamic test requirements of Federal Motor Vehicle Safety Standard No. 213, "Child Seating Systems." No failures were experienced in the test program.

BEST COPY AVAILABLE

Odometer Tampering

NHTSA continued its odometer enforcement program, confirming odometer fraud in 97 investigations conducted in 23 states. The investigation found that the mileage had been rolled back on 752 vehicles. Seventeen cases involving large-scale odometer tampering were turned over to the U.S. Department of Justice for criminal prosecution and civil penalties were assessed against 37 dealers with lower numbers of violations. In addition, 27 cases were referred to state enforcement agencies and the results of 17 investigations were given to consumers so that they could take private civil actions to recover damages.

Fuel Economy

The average fuel economy of automobile manufacturers increased in 1982, and virtually all manufacturers met or exceeded federal fuel economy standards. Passenger automobile total fleet fuel economy for 1982 is expected in increase from 25.1 mpg in 1981. Mid-model year reports for the 1982 total fleet indicated 26.2 mpg, with domestics at 24.6, and imports at 30.8 mpg.

NHTSA issued a final rule to simplify the semiannual reports that automotive manufacturers must submit concerning their plans to meet fuel economy standards. It also issued a final rule on model years 1981-85 alternative fuel economy standards for low-volume manufacturers.

Litigation

D.O.T. v. State Farm Mutual Automobile Insurance Co., et al. On September 8, 1982, the Solicitor General of the United States, on behalf of the Department of Transportation, filed a petition for writ of *certiorari* with the U.S. Supreme Court, seeking review of the June 1, 1982, decision of the U.S. Court of Appeals for the District of Columbia Circuit which reversed NHTSA's order rescinding the automatic restraint requirement of Federal Motor Vehicle Safety Standard No. 208.

Center for Auto Safety v. Lewis (Ford Transmissions). On August 10, 1982, the U.S. Court of Appeals for the District of Columbia Circuit entered an order affirming the October 21, 1981, order of the U.S. District Court for the District of Columbia which granted the agency's motion for summary judgment. The plaintiffs challenged the former Secretary of Transportation's decision to agree to a settlement of the NHTSA investigation which provided that Ford Motor Co. would send warning labels to owners of some 20 million vehicles that were the subject of a NHTSA investigation because of allegations that their automatic transmissions unexpectedly slipped from park to reverse. The District Court held that the Secretary had discretion to settle investigations and that the decision in the case was reasonable.

Center for Auto Safety v. NHTSA (Fuel Economy Advance Notice Case). On November 25, 1981, the Center for Auto Safety filed a petition in the U.S. Court of Appeals for the District of Columbia Circuit seeking review of NHTSA's decision to withdraw an advance notice of proposed rulemaking concerning post-1985 fuel economy standards. The court deferred ruling on the Agency's motion to dismiss and the parties filed their brief on the merits.

Center for Auto Safety, et al. v. Peck (Bumper Standard). On July 12, 1982, the Center for Auto Safety and State Farm Mutual Automobile Insurance Co. filed petitions in the U.S. Court of Appeals for the District of Columbia Circuit seeking review of NHTSA's May 14, 1982, order which amended the bumper standard by reducing test impact speed and damageability requirements. The proceedings were stayed pending NHTSA's decision on a petition for reconsideration of the amendment of the standard.

Waddington v. Ford Motor Co. On March 8, 1982, the U.S. District Court for the Central' District of California entered an order granting the government s motion for summary judgment in an action in which plaintiffs challenged the adequacy of the remedy in the Ford Pinto gas tank defect investigation. The order also sought to require the agency to investigate alleged defects in fuel tank systems of other Ford vehicles. The plaintiffs had not appealed the judgment of the District Court.

United States v. Fiat Motors of North America, Inc. NHTSA was monitoring Fiat's compliance with the terms of a consent order in which Fiat agreed to recall 1972-74 Model 124 Fiat automobiles for undercarriage corrosion which could impair the attachment of the steering box, idler arm mounting, front upper control arms or rear trailing arms. The original order was entered in July 1981. Subsequently, the Agency engaged in further negotiations with Fiat which resulted in modifications to the original order, including a new definition of the defect and the resolution of claims with respect to 1971 Model 850 Fiats, and for undercarriage corrosion, by setting specified repurchase amounts for vehicles found defective. The modified consent order was entered by the court in December 1981.

Traffic Safety Statistics

NHTSA's National Center for Statistics and Analysis develops, maintains, and operates a comprehensive accident data collection and analysis program to identify safety problems and to aid in development and evaluation of countermeasures. The Center's activities provide the information and statistics necessary for sound safety

BEST COPY AVAILABLE

decisions fulfilling NHTSA's responsibility for establishing effective and relevant highway safety programs. As a leader in traffic accident data collection and analysis, the Center serves all members of the highway safety community including state and local governments, other federal agencies, the Congress, motor vehicle manufacturing industries, and private citizens.

Significant fiscal year 1982 accomplishments included:

- The Fatal Accident Reporting System continued to provide a running census of fatal accidents.
- Operation of the National Accident Sampling Systems at 52 sites, which collected detailed information on approximately 10,000 accidents.
- Special investigations of high interest accidents such as, school bus occupant fatalities, vehicles with new safety equipment, and potential safety defects.
- Responses to some 3,000 request for highway safety statistical information.
- Completion of a special study on "The Role of Alcohol, Marijuana and Other Drugs in the Accidents of Injured Drivers."
- Completion of a Report to the Congress on "Large Truck Accident Causation."

Administration

NHTSA reorganized itself, effective July 31, 1982. Its new structure provides a better balance between the technological and the human factors approaches to solving traffic safety problems.

Total employment decreased from 746 full-time permanent positions in fiscal year 1981 to 619 full-time permanent positions in fiscal year 1982.

Actions to improve operating efficiency and reduce costs saved $2.6 million for 1982. For example, the decision to combine compliance testing and safety belt testing saved $604,000.

The Paperwork Reduction Act of 1980 requires reducing the paperwork burden on the public. NHTSA requested 58,373,890 burden hours* for 1982 and 16,206,849 for 1983. The decrease of 42,167,041 burden hours was due largely to clarification of program requirements which appeared to impose recordkeeping requirements on the states.

NHTSA also implemented an Executive Management Information System (EMIS) which identifies and tracks priority activities, alerts management to delays or schedule adjustments, and provides additional reference data for decisionmaking.

Equal Employment Opportunity. Despite personnel reductions, minority representation in the workforce increased from 22 percent to 24 percent, and the percentage of minority and female employment in both the professional and technical categories remained constant.

The first "Federal Women's Week" was developed and the Agency also participated in the Department's Hispanic Heritage Week activities.

Minority Business Enterprise. A Minority Business Enterprise goal of $2.3 million was exceeded by 140 percent. Included in this achievement was a subcontract award to develop the means by which the NHTSA safety belt message could be communicated effectively to minority audiences.

Amtrak continued improving its passenger services by placing in service the last of its Superlines. It also took delivery of the first of 150 new Amfleet II cars for long-distance routes in the east and discontinued the last of the steam-equipped cars it inherited in 1971.

FRA encouraged and assisted Amtrak in its non-passenger activities, including real estate development, repair of transit cars, and assembly of new subway cars at Amtrak's Beech Grove, Indiana, facility.

---

* "Burden hours" is an Office of Management and Budget term for the time taken by a member of the public to provide information under an OMB requirement.

BEST COPY AVAILABLE

Urban Mass Transportation Administration

The role of the Urban Mass Transportation Administration (UMTA) is to carry out the Department's mandate to improve urban mass transportation. It is the principal source of Federal financial assistance to help both urban and non-urban areas plan, develop, and improve mass transportation systems.

The more significant activities of UMTA during Fiscal Year 1982 included a major overhaul of procedures and regulations to make UMTA more responsive to its grantees; a reorganization of UMTA Headquarters for increased efficiency; and a legislative proposal to alter significantly the role of the Federal Government in the funding of urban mass transportation in years to come.

Regulations

As a consequence of past criticism of Federal regulations and requirements as inhibiting local transit management flexibility, UMTA completed a number of initiatives to remove such federally imposed hurdles. When the current Administration took office, 14 specific regulations affected UMTA programs; 25 proposed regulations were in various stages of development. Three existing regulations have been eliminated, three others clarified, and efforts to implement 20 of the 25 regulations previously under development have ceased.

UMTA Reorganization

In 1982, UMTA completed a major reorganization of its Headquarters offices, thereby streamlining operations, increasing UMTA's ability to address changing national urban transportation needs, and improving program delivery to the transit providers and users.

The new organization resulted from a year-long series of studies, critiques and analyses of UMTA and its activities which included the following achievements:

- Consolidation of capital, operating and planning grant programs into one office, with three geographical desk officers to serve as focal points for regional administrators;
- Consolidation of all technical and management assistance programs into one office;
- Establishment of an Office of Financial Management responsible for budget execution and control and decentralized cost centers within Regional and major Headquarters offices;
- Establishment of a Management Information Center to provide rapid and accurate responses to inquiries from the Congress and grant recipients; and
- Expansion of the scope and authority of the regional offices.

Legislation

The Administration proposed significant revisions to the UMT Act. Alternative bills developed in Congress superseded the Administration proposal but their major points highlighted the Administration's position on transit. The proposal was a four-year bill which would make important changes in the existing Act.

Block Grant Concept. Most significant of the proposed changes affects the structure of the UMTA program. A key component of the proposed legislation is the capital formula program set out in a new Section 9. This signaled a major shift in the basic character of the Federal capital program, in marked contrast to the extensive Federal involvement and lengthy paperwork that characterized these programs in the past. Currently, UMTA approves specific projects, such as the acquisition of 50 buses or the construction of a maintenance facility. The result has been a very "hands-on" Federal role with UMTA reviewing each grant application and entering into a grant agreement for each project. Under the proposed capital formula program, a recipient would develop one application which might cover a range of capital activities and would then enter into one annual grant agreement with UMTA.

Operating Assistance Grants. This Administration remains firmly committed to the principle that responsibility for day-to-day operation of local transit systems, including necessary financial assistance, can be handled best at state and local levels of government. Thus, it has proposed a gradual elimination of the Federal operating assistance program. The program has generated unwarranted expectations as to levels of service local governments can realistically afford; has unduly distorted the collective bargaining process; has served as a disincentive for local governments to implement operating efficiencies necessary to reduce costs, and operating assistance subsidies have obviated the need for local governments to make the politically difficult decisions to bring operating costs into line with revenues and with local and state support.

BEST COPY AVAILABLE

To assist transit operators in making the transition away from federally supported subsidies, UMTA reoriented its research, demonstration and training programs toward technical assistance to the transit industry and greater involvement of locally oriented strategies for providing dedicated funding sources for their transit systems. UMTA will continue to assist localities to develop improved pricing strategies, service allocation and costing methods. UMTA will improve its capacity to serve as an idea bank for information and know-how that serves transit managers. (See "Technical Assistance," which follows.)

Technical Assistance

In view of the Administration's proposal to reduce and eventually phase out Federal operating assistance for transit, the need to improve transit productivity represents an important challenge. UMTA's Section 15 technical assistance program is a valuable management tool for meeting that challenge. One of UMTA's most comprehensive information resources, it provides uniform financial and operating data on transit systems receiving Federal operating assistance funds—information that can serve the needs of decision-makers and managers at all levels of government and assist in public sector investment decisions. As a result of transit operators working with UMTA, information now is available covering a three-year period. The information offers unique insights into many of the complex, often competing, policy decisions facing the transit industry.

Summary of Capital Assistance

Procedures. During 1982, UMTA made significant progress toward its goal of streamlining its various grant programs. It revised its Section 5 program, which supplies both capital and operating assistance to local mass transit systems, and instituted a shorter and less burdensome application form. Grantees now have only to certify they are in compliance with a number of important grant requirements.

Transit Assistance Grants. UMTA obligated $3.6 billion in transit assistance grants, including: urban discretionary grants (Section 3), $1.6 billion; urban formula grants (Section 5), $1.3 billion; Interstate Transfer grants, $568 million; Federal Aid Urban Systems (FAUS) grants, $53 million; and non-urban formula grants (Section 18), $74 million.

The urban discretionary grants included funds for modernizing older rail transit systems ($849 million), plus funds for expanding and renovating bus transit systems ($531 million). While the Administration resolutely holds that urban discretionary grants should not be used to initiate construction on new rail transit systems until the state of the national economy improves, it obligated $238 million during fiscal year 1982 to continue work on new transit systems (in Miami, Baltimore, Buffalo, and Atlanta) that had been begun before the current policy was announced.

The Interstate Transfer Program, besides obligating money for projects in several cities, also received and approved 16 new requests to withdraw planned segments from the Interstate Highway system. In future years, those cities could request grant applications for mass transit projects.

Civil Rights

UMTA's civil rights commitment was continued during the past year. Especially important was the emphasis given its program to assure equitable participation by minority and female-owned businesses in UMTA-assisted projects. Several innovative policy directions were initiated during the fiscal year.

In order to deal with the difficulty that otherwise qualified minority business enterprises (MBEs) have had historically in securing bonding, UMTA developed an innovative policy initiative designed to utilize Federal resources to encourage private sector expansion of bonding efforts to MBEs. This project will greatly expand the availability of bonding resources to MBEs, thereby enhancing their productive capabilities while contributing to overall economic development at the local level.

UMTA has contributed significantly (through in-kind services as well as financial transfers) to the Department's development and implementation of a creative concept that utilizes Program Management Centers (PMCs) to help MBEs in overcoming historical and institutional barriers to participation in transportation related projects. The PMCs have been strategically located in major cities across the country and their charters dictate that they provide management, technical and financial assistance to MBEs interested in DOT funded activities. PMCs also are charged with assisting DOT grantees in identifying and matching MBEs with available procurement and contract opportunities. This has resulted in over $255 million in contract awards by UMTA grantees to targeted group representatives in fiscal year 1982.

A newly created UMTA Small and Disadvantaged Business Committee reviews all direct procurement contracts and actions to ensure that minority and women-owned, as well as small and disadvantaged, businesses are given meaningful opportunities to participate in all direct procurement emanating from UMTA. Action on any proposed contract by UMTA's Procurement Office is contingent on this Committee's review and recommendation for avenues of participation by these businesses. The

BEST COPY AVAILABLE

results of the Committee's efforts are reflected in UMTA exceeding its 20 percent goal for direct minority procurement with a total of more than $5 million.

Another program of special note is the Section 20 Human Resource Program for which special funds have been set aside for projects such as minority and female career development programs, a minority contractor management and technical assistance project, and a minority bonding project. In 1982 Section 20 projects, totaling $2.25 million, were funded in Milwaukee, Gary, Los Angeles, and the San Francisco Bay Area. Another Section 20 project was funded to provide technical assistance to MBEs in Region VII.

Policy Statements

UMTA issued a number of policy papers to codify certain of its practices. A policy on Letters of No Prejudice appeared in the Federal Register October 21, 1982, and the Para-transit Policy was issued on October 18, 1982. In addition, a policy was issued on Charter Bus Regulations proposing a number of alternative ways UMTA might enforce the statutory controls on UMTA grantees operating charter bus services.

Private Enterprise Emphasis

In September 1982, the Administrator announced the formation of a working group on private sector initiatives. Its purposes are to:

- Establish technical assistance and information exchange with local decisionmakers, transit board members and other public officials concerning a broad range of opportunities to more fully involve the private sector in the operation and financing of mass transit;
- Demonstrate successful examples of how the private sector can play a more important role in mass transportation by financing service and reducing costs; and
- Identify what actions and activities can be undertaken by the Federal Government and others to stimulate and promote fuller private involvement.

Technical Assistance

The Office of Technical Assistance directs and coordinates research, development and allied activities relating to UMTA technology programs and objectives as follows:

- The Service and Management Demonstrations Program focuses on improving information dissemination and outreach in addition to continuing to demonstrate innovations in transit service and management.
- As the transit industry experiences problems with vehicle subsystems and components, UMTA's Subsystem Improvement Program continues to develop and test modifications for transmission, brake and air conditioning systems.
- The Section 15 information program collects, standardizes and reports on key financial and operating data from all transit systems receiving Federal operating assistance.
- The Safety and Security program concentrates on preventive measures developed through the cooperative efforts of the Federal program, local transit authorities and private industry.
- The Methods and Support Program assists transit operators to meet a range of operational and financial challenges.
- The Rail and Construction Technology Program develops techniques to arrest the physical deterioration of rail systems through improved maintenance practices and attempts to reduce the capital and operating costs of rail systems.

BEST COPY AVAILABLE

Saint Lawrence Seaway Development Corporation

The Saint Lawrence Seaway Development Corporation was created in 1954 to construct the U.S. facilities for the Saint Lawrence Seaway project. Since 1959, when the Seaway opened to navigation by ocean going ships, the Seaway Corporation has been responsible for operating, maintaining, and developing the part of the Seaway between Montreal and Lake Erie which is within U.S. territorial limits.

The Seaway Corporation is self-sustaining, not dependent on tax revenues. All operation, maintenance, administration and capital improvement costs are paid from revenues obtained from tolls charged to vessels that use the system.

A total of 428 million metric tons of cargo moved through the Montreal-Lake Ontario section in 1982 on 4,093 commercial ships. This tonnage represented a decrease of 15 percent from 1981 tonnage. Because of a weak worldwide charter market, ocean ship transits were up by 113 to 1,164. Lake vessel transits, however, declined by 352 to 2,439. This was the result of a lay up of nearly 40 percent of the Great Lakes inland fleet because of the large decrease in iron ore movements.

A weak economy contributed to the decline in overall Seaway tonnage in 1982. Grain cargoes of 24.3 million metric tons in 1982 were about equal to the previous year as a result of heavy movements of Canadian grain that, for the most part, offset about 10 percent drop in U.S. grain shipments.

The most deleterious effect on Seaway traffic in 1982, however, came from the 43 percent drop in iron ore tonnage—to 7.4 million—as a result of a precipitous slump in demand at U.S. and Canadian steel mills.

U.S. export coal shipped through the Seaway in 1982 totaled 1.2 million metric tons. This was off 32 percent from the record-setting volume of the previous year, but still represented a substantial amount compared to the minuscule volumes registered during the Seaway's earlier years.

General cargo through the Seaway in 1982 fell 4 percent to 3.5 million metric tons. The change reflected both reduced domestic industrial production and the impact of the U.S. Department of Commerce suspension of its trigger price mechanism. Container and government tonnages for the year, however, each rose 20 percent.

A major event in the Seaway Corporation's history occurred December 18, 1982, when the President signed into law the U.S. Department of Transportation's fiscal year 1983 appropriations bill, which contained a provision that canceled the $110 million balance on the U.S. Seaway construction debt.

For the Seaway Corporation, the law meant a strengthening of the organization's financial condition at a crucial stage in which revenues were lagging severely because of the economy, and lock maintenance was becoming critical. The law also put the Seaway Corporation on a comparable financial footing with its counterpart agency in Canada. For Seaway users, the greatest impact of the law will be realized after 1985, when tolls would have otherwise been raised 70 percent to meet bond payments.

Some of the key achievements of the Seaway Corporation in 1982 were:

- Accomplishing essential large-scale maintenance on the locks near Massena, New York.
- Completing a million-dollar lock gate assembly area needed in the event of a gate failure.
- Developing a long-range commodity forecast.
- Reconstructing the administration building, seriously damaged by arsonists in 1980.

In March, the Seaway Corporation and its Canadian counterpart agency released a new long-range study of commodity flows through the Seaway. The study provided the Agencies with tonnage forecasts that can be used to estimate future vessel traffic. Overall, the study estimates that average annual growth from 1980 through 2000 on the combined Welland and Montreal-Lake Ontario sections of the Seaway will be about 2 percent. Copies of the executive summary and the main report of "Seaway Commodity Forecast, 1980 to 2000," may be purchased through the National Technical Information Service (NTIS) using order numbers PB 82-232869 and PB 82-232877, respectively.

On June 25, 1982, the Secretary of Transportation helped dedicate the Seaway Corporation's reconstructed administration building in Massena, New York. The modernized facility features significant improvements

BEST COPY AVAILABLE

that enhance energy efficiency, aid access for the handicapped, and incorporate the latest in fire protection, safety, and security measures.

Seaway Corporation development activities in 1982, in addition to the commodity study, included:

- Coordination with the Buffalo District of the U.S. Army Corps of Engineers on its "St. Lawrence Seaway Additional Locks Study.
- Production of the "St. Lawrence Seaway 1981 Traffic Report," which may be obtained from the Seaway Corporation.
- Production of the 1981 edition of "U.S. Great Lakes Ports Statistics for Overseas and Canadian Waterborne Commerce," which may be purchased through the NTIS (order number PB 82-206622).
- Continued participation on an international interagency committee seeking to provide a precise navigation system for vessel pilotage on the St. Lawrence River during periods of ice or poor visibility.

According to the Seaway Act of 1954, the Seaway Corporation is required to submit to the President, for transmission to Congress, a separate annual report based on calendar year results. Single copies of the most recent report may be obtained at no charge from: The Public Information Office, Saint Lawrence Seaway Development Corporation, P.0. Box 520, Massena, New York 13662.

REST COPY AVAILABLE

Maritime Administration

Late in fiscal year 1981, Congress approved the transfer of the Maritime Administration (MARAD) from the Department of Commerce to the Department of Transportation. This action became effective on August 6, 1981, with the signing of the enabling legislation (P.L. 97-31).

The Maritime Administration was established in 1950 as a continuation of the Maritime Commission, formed originally under the Merchant Marine Act of 1936.

MARAD is responsible for developing and maintaining a merchant marine capable of meeting America's requirements for both commercial trade and national defense. To carry out its responsibilities, MARAD:

- Administers financial aid and other programs assisting American shipbuilders and ship operators.
- Sponsors research and development projects to enhance the maritime industry's productivity and competitiveness.
- Conducts promotional and marketing programs to increase shipper support for U.S. flag vessels in foreign trade
- Promotes domestic shipping and port and intermodal development in the maritime industry.
- Operates the U.S. Merchant Marine Academy at Kings Point, New York, and provides financial support to six state maritime academies.
- Negotiates bilateral maritime agreements and participates in international maritime forums.
- Maintains a national defense reserve fleet for timely deployment in national emergencies.

The physical move to the Department of Transportation began with the transfer of MARAD's headquarters staff and other components to Departmental headquarters in September 1981.

In October 1981, the Department began a program-by-program and issue-by-issue review of U.S. maritime policy.

Pending completion of the review and the initiation of new maritime programs, the Department announced reduction in two maritime financial support areas—a moratorium on the construction differential subsidy program and a limitation on further expansion of the operating differential subsidy program.

The Department requested no new construction differential subsidy funds in the fiscal year 1982 budget, pending further review of the program's effectiveness.

Commitments under the ship financing guarantee program were $635 million in fiscal year 1982. MARAD also established a three-tier priority system which gave cargo vessel financing guarantees the highest priority.

Meanwhile, Congress authorized a new, temporary, "build abroad" option for eligible recipients of, or applicants for, operating differential subsidy. Under this program, contained in a new Section 615 added to the 1936 Act, a number of U.S.-flag ship operators sought MARAD's permission to acquire new ships or reconstruct vessels abroad. Processing these applications began late in fiscal year 1982.

Maritime Policy Development

Concurrently with MARAD's transfer to the Department of Transportation, the President designated the Secretary of Transportation as the Administration's spokesperson on maritime affairs.

After a comprehensive review of long-standing federal maritime policies, the Secretary announced a series of policy initiatives designed to revitalize the American merchant marine.

These initiatives included:

- Reform of regulations governing liner vessels engaged in U.S. foreign trade.
- Retention of the moratorium on requests for construction subsidy funds.
- Administrative reform of the Operating Differential Subsidy program to increase operating flexibility and reduce costs.

The Secretary recommended extending the temporary authority granted by Congress permitting subsidized vessel operators to construct, convert, or acquire ships abroad. The Secretary also favored legislation enabling these operators to use their capital construction funds for such purposes.

The proposed reform legislation—characterized as the cornerstone of the new maritime policy—would expand antitrust immunity in ocean shipping and clarify other provisions of a 66-year-old law. It also would ensure that American liner operators engaged in foreign trade were not subjected to more stringent regulatory constraints than their foreign flag competitors. The reform bill was approved by the House of Representatives on September 15, 1982, and similar legislation was pending in the Senate at the end of the fiscal year.

BEST COPY AVAILABLE

Maritime Aid

Reassessment of the maritime aid programs administered by MARAD began in fiscal year 1981 and continued in fiscal year 1982.

Under the Merchant Marine Act of 1936, as amended, MARAD was authorized to pay a construction differential subsidy (CDS) of up to 50 percent, to offset the disparity between U.S. and foreign shipbuilding costs. In addition, operating subsidies were authorized to offset the differential of operating ships under the U.S. flag in the foreign trade. Additionally, the Merchant Marine Act of 1936 provided for government ship financing guarantees of up to 87.5 percent of the actual cost of building or converting merchant vessels in U.S. shipyards.

The Department requested no CDS funds in the MARAD budget for fiscal year 1982 and indicated it would continue to honor all ODS contracts in force, but would approve no new operating subsidy agreements.

The "build abroad" option, approved in August 1981 as a new Section 615 in the Merchant Marine Act of 1963, was designed to increase the competitiveness of the U.S. merchant marine without the direct expenditure of U.S. tax revenues. It permitted U.S.-flag operators who were receiving or applying for ODS to construct, reconstruct, or acquire vessels in foreign shipyards, upon determination by the Secretary of Transportation that CDS funds were not available to support the work in a private U.S. shipyard. MARAD supported extending the build abroad option indefinitely.

Title XI of the 1936 act assisted U.S. vessel owners and operators in attracting private investment capital by providing for ship financing guarantees. In fiscal year 1982, $635 million in guarantees were committed under Title XI.

In other policy initiatives, the Department:

- Called for regulatory reforms that would address rules adversely affecting the shipping and shipbuilding industries.
- Initiated reforms to ensure operating flexibility and reduce costs in administering the operating differential subsidy.
- Supported action by the Federal Maritime Commission to eliminate the regulation of domestic waterborne trade.
- Sought to encourage increased foreign investment in U.S.-flag merchant shipping by increasing the allowable percentage of foreign ownership, while retaining U.S. management control of such vessels.
- Announced it would sponsor legislation to relieve U.S.-flag operators from paying an *ad valorem* duty on ship repairs made overseas.
- Continued efforts by the Department of Defense to expand the appropriate use of civilian non-government personnel to crew Government ships.
- Called for legislation permitting U.S.-flag ship operators to use existing and newly deposited tax-deferred capital construction funds to construct or acquire foreign-built vessels.
- Reaffirmed support of the Jones Act (reserving 100 percent of all domestic waterborne cargos for U.S.-flag vessels) and the cargo preference laws (reserving for U.S.-flag commercial carriage at least 50 percent of all government-generated, ocean-borne cargos).

In the ongoing process of formulating policy, continuing at the end of the fiscal year, the Administration was considering the views and recommendations of ship operators, maritime labor, shippers, port interests, and relevant government sectors.

To formalize and further this dialogue within the maritime industry, the Secretary established a 21-member Maritime Advisory Committee, which held its first meeting in June 1982.

Closer cooperation was encouraged and achieved between MARAD and the U.S. Navy in fiscal year 1982. MARAD strengthened the link between the civilian merchant marine and the U.S. Navy, which the commercial fleets supports in times of war or national emergency. One of the key joint efforts was to increase the readiness of the national defense reserve fleet to provide logistic support to the armed services.

Shipbuilding

Although there were no new construction differential subsidy appropriations in fiscal year 1982, funds carried over from previous years were sufficient for essential engineering changes and other costs associated with the completion of CDS construction and conversion work already underway at the start of 1982.

On September 30, 1982, 26 deep-draft merchant vessels totaling 844,000 dwt. and valued at $1.8 billion were under construction or on order in American shipyards. Of that total, nine were being built with construction subsidies and were also covered by the Title XI program. An additional 11 of the 17 privately financed vessels carried Title XI guarantees.

Title XI guarantees totaling approximately $635.7 million were committed by MARAD during fiscal year 1982. Three subsidized ship conversions also were underway at the end of the fiscal year.

Under the temporary Section 615 authority, MARAD approved applications by 10 companies to build or acquire up to 36 new merchant vessels and reconstruct 13 others in foreign shipyards.

American shipyards delivered 12 new commercial vessels totaling 309,780 dead weight tons (DWT) during fiscal year 1982. Three of the 12 were subsidized.

BEST COPY AVAILABLE

Ship Operations

On September 30, 1982, the U.S.-flag, privately owned, deep-draft merchant fleet (including the Great Lakes fleet) totaled 710 vessels with a cargo-carrying capacity of 24.5 million dwt.

The total included 567 ocean-going ships with 483 ships on active status and 84 inactive. Carrying capacities averaged 37,700 dwt., average age 18.3 years, with total carrying capacity 21.4 million dwt.

In world fleet rankings, as of January 1, 1982, the U.S. privately owned ocean-going fleet placed 8th in carrying capacity and 11th in the number of ships.

Operating Differential Subsidy

U.S. flag merchant vessels that operate in an "essential" foreign trade are eligible for an operating differential subsidy (ODS). Subsidy outlays during fiscal year 1982 amounted to $400.7 million.

In addition to the new Section 615 authority, the Omnibus Budget Reconciliation Act amended the Merchant Marine Act of 1936 by adding a new Section 614. This section provided that a subsidized operator, subject to certain conditions, might elect to suspend an ODS agreement for a period of not less than 12 months for all or a portion of its vessels which were less than 10 years old. Three ODS carriers exercised that option for a total of three vessels (two dry-bulk ships and one ore/bulk/oil ship) in fiscal year 1982.

Domestic Shipping Operations

In policy statements issued during this reporting period, the Administration reaffirmed its support of the Jones Act. This law requires that U.S.-built, U.S.-flag vessels with U.S.-citizen crews transport all cargo moving in the U.S. domestic waterborne trade.

The domestic segment of the American merchant marine carried more than one billion tons of cargo annually. These operations include the Great Lakes, the inland waterways, and the non-contiguous ocean, intercoastal, and coast-wise trades.

The U.S. Great Lakes fleet numbered 143 vessels at the close of fiscal year 1982.

As a result of U.S. interagency promotional efforts, American ports on the Great Lakes shipped record volumes of bagged food, farm and military equipment, and other commodities and materiel overseas under U.S. foreign assistance programs subject to cargo preference laws.

MARAD also provided technical assistance to the newly established Great Lakes Cargo Marketing Corporation and conducted international trade forums for American shippers and U.S. flag operators at Akron, Ohio and Pittsburgh, Pennsylvania.

In calendar year 1981, traffic on the inland system totaled 613.9 million tons, down from 629.1 million tons in 1980.

A user charge in the form of a fuel tax was imposed on commercial towboat operators in 1980, with the revenues going into the Inland Waterways Trust Fund. The initial tax, 4 cents a gallon, was increased to 6 cents in 1981 and to 8 cents on October 1, 1982. By the end of fiscal year 1982, the trust fund showed a balance in excess of $56 million. The fund was established to finance inland waterway projects.

Seven new merchant vessels totaling over 257,000 dwt. of capacity were added to the domestic ocean shipping sector of the U.S.-flag fleet during fiscal 1982. The vessels were employed principally in the coast-wide trade.

Maritime Labor and Training

MARAD provides for the training of merchant marine officers and for supplementary training related to safety in U.S. waterborne commerce, coordinates maritime labor policies with national and international organizations, promotes peaceful labor relations, and sets vessel crew sizes for subsidy purposes.

Its responsibilities include operating the U.S. Merchant Marine Academy at Kings Point, New York. The Academy trains young men and women to become officers in the American merchant marine. In addition to their classroom training, Kings Point midshipmen spend a year at sea on American-flag vessels.

All graduates receive U.S. Coast Guard licenses as deck or engineering officers, or both, and bachelor of science degrees. Most graduates are also offered ensign's commissions in the U.S. Naval Reserve.

MARAD also provides financial assistance to six state maritime academies located at Vallejo, California; Castine, Maine; Buzzards Bay, Massachusetts; Traverse City, Michigan; Fort Schuyler, New York; and Galveston, Texas.

Associate degrees are awarded by the Michigan Academy. Graduates of the other five state academies, if qualified, are commissioned as ensigns in the U.S. Naval Reserve. They also receive B.S. degrees and U.S. Coast Guard licenses as officers in the merchant marine.

Average monthly seafaring employment in all U.S.-flag sectors (private, government contract, and Great Lakes) decreased from 25,184 jobs in fiscal year 1981 to 22,861 in fiscal year 1982. During the same period, the collective work force in selected U.S. commercial shipyards declined from 121,542 to 114,347, while average longshore employment declined from 46,245 to 42,380.

BEST COPY AVAILABLE

During fiscal year 1982, MARAD opened a new Merchant Seaman Fire Training Center at Swanton, Ohio, the fourth federal school offering hands-on fire fighting instruction to merchant seamen.

MARAD transferred to private-sector organizations the operation of its five radar training centers. The facilities were located in New York, New York; San Francisco, California; Toledo, Ohio; New Orleans, Louisiana; and Seattle, Washington.

Port and Intermodal Development

MARAD continued its support of ports and intermodal transportation. The first annual assessment of the status of the U.S. public port industry was compiled as a new report to the Congress from the Secretary of Transportation under Public Law 96-371. The report, released in September 1982, described the history and composition of the U.S. port industry, its economic and technological development, and its importance to national defense. It also examined a number of issues and concerns which industry representatives identified as impediments to U.S. inland and port and seaport development.

During fiscal year 1982, MARAD also provided research and technical assistance to state and local port authorities and related private industry. In its intermodal research, MARAD identified growth trends in mini-bridge operations, indicating a potential for more use of inland carriers as substitutes for previously all-water, port-to-port services.

MARAD provided technical assistance and conducted research in a number of areas affecting ports and intermodal transportation. The projects included the development of automated systems for marine terminal management, vessel traffic in-port reporting systems, facility and equipment inventories, and comprehensive port planning studies covering six additional states.

In cooperation with state and local authorities, MARAD had developed 17 regional port plans embracing 42 states and 160 individual port communities.

MARAD also participated in a number of interagency efforts to reduce constraints on port and channel dredging and supported the establishment of user fees to recover the cost of such improvements.

Under Department of Transportation sponsorship, government and industry representatives from the United States visited seven major bulk cargo handling ports in the People's Republic of China. The purpose of the mission was to provide technical assistance and to evaluate bulk trade opportunities and constraints under the U.S.-P.R.C. Agreement on Maritime Transport.

National Security

Two of MARAD's primary peacetime responsibilities are to develop and test plans for the marshaling and operation of U.S.-flag vessels in time of war or emergency, and to enhance the ability of the U.S. commercial fleet to provide military logistic support. MARAD maintains the national defense reserve fleet (NDRF) (including its high-readiness component, the ready reserve fleet (RRF)) as a source of sea-lift vessels readily available to augment the commercial feet in fulfilling the merchant marine's traditional role as the nation's "fourth arm of defense."

At the end of this reporting period, there were 302 vessels in the NDRF, including scrap candidates and vessels retained for the Navy, in addition to some 170 ships retained for activation as a sea-lift augmentation force. Of the 170 sea-lift ships, 29 comprised the RRF. Ships of the RRF can be activated for service in 5 to 10 days. Other ships of the NDRF would be activated during a period extending from 30 to 90 days after the start of an emergency.

Market Development

MARAD conducts a comprehensive market development program designed to increase U.S.-flag carriage of the nation's ocean-borne foreign trade.

MARAD's marketing program encourages firms engaged in foreign commerce to ship a fair share of their cargos on U.S.-flag vessels and provides the carriers with market leads and trade data.

Its shipper information system provides trade intelligence on U.S. shippers and commodities gathered through marketing specialists. In fiscal year 1982, it provided more than 40 automated data processing reports in response to requests from U.S.-flag carriers.

By drawing on marketing intelligence from private and government sources, MARAD also identified 2,434 individual business opportunities for U.S.-flag operators.

MARAD also assisted U.S.-flag carriers in market planning with studies of market demand and strategy. It also completed a study of options available to the United States upon ratification of the U.N. Code of conduct for liner operations.

MARAD monitors shipments of cargos generated by programs subject to cargo preference laws. These laws require that at least 50 percent of all government-generated cargos subject to them be transported on privately-owned U.S.-flag commercial vessels, provided that such vessels are available at fair and reasonable rates. All waterborne military cargo consigned for use by the United States must be shipped on U.S.-flag vessels.

The importance and continuing need for U.S.-flag access to government-sponsored cargos was reemphasized in policy statements by the Secretary of Transportation and the Maritime Administrator before two Congressional committees in fiscal year 1982.

BEST COPY AVAILABLE

Research and Development

MARAD conducts a variety of research programs on shipbuilding and ship operations in cooperation with the U.S. Coast Guard, U.S. Navy, other federal agencies, and the maritime industry.

During fiscal year 1982, the shipbuilding research program assessed ways to reduce the cost of producing U.S. naval vessels and commercial ships in this country. Among the cost-cutting methods explored were new techniques in industrial engineering, the development of equipment standards, and automation of parts of the ship design and production stages. Significant additional work needs to be done to make the U.S. shipbuilding industry appreciably more competitive in world markets and to ensure the retention of a stable American shipbuilding base.

Energy efficiency continued to be a major priority of the U.S. merchant marine. In addition to projects designed to lower the fuel consumption and energy costs of U.S. vessels, MARAD was engaged in research to develop alternative marine fuels. In cooperation with industry, MARAD also continued studies on a return to coal-fired propulsion plants, including the use of coal-oil or coal-water slurries.

The effective use of container ships in military logistic support roles also received major attention in fiscal year 1982. Container ships represent a major segment of the U.S. merchant fleet. They are highly productive and efficient vessels, but are designed to carry containers in cells measuring 8 feet wide. They cannot accommodate large military cargos, such as tanks, military vehicles, or field artillery pieces. To increase their cargo stowage capabilities for both civilian and military shippers, a cargo module called Sea Shed has been developed. Sea Shed, which fits across three adjacent container cells, can quickly convert a container ship to carry larger cargos. The first Sea Shed prototypes were delivered in fiscal year 1982, preparatory to shore side tests at Sunny Point, North Carolina.

In another interagency effort, MARAD and the U.S. Coast Guard initiated a research project designed to open up northern Alaska to commercial shipping. This program involves a series of winter voyages by a Coast Guard icebreaker through the Bering Straits into the Chukchi Sea. The voyages provided data on the ice conditions that must be overcome to permit year-round commercial service to this resource-rich area.

Automating many of the tasks that are part of ship operations was the objective of still another MARAD program. One of the costliest aspects of these operations is the paperwork involved with cargo shipments. MARAD and the Military Sea-lift Command were working with ship operators to develop computer and communications networks that would track shipments from origin to destination, while automatically performing other functions such as cargo booking and customer billing.

International Maritime Activities

MARAD closely monitors international events that could affect the welfare of U.S.-flag merchant vessels engaged in world trade. It also conducts bilateral maritime discussions with foreign government and industry officials and participates in meetings of international organizations concerned with maritime transport.

MARAD has Foreign Maritime Representatives in London, Athens, Brussels, Rio de Janeiro, and Tokyo. These offices assist the U.S. Government in carrying out its foreign and domestic maritime policy and programs.

In fiscal year 1982, MARAD conducted or participated in discussions on shipping with representatives of the Philippines, South Korea, Japan, and a number of European countries. Additionally, U.S. Government and industry officials took part in talks with representatives of the People's Republic of China aimed at facilitating the operation of the Agreement on Maritime Transport between the two countries. The U.S.-P.R.C. bilateral agreement was similar to the lapsed U.S.-U.S.S.R. Maritime Agreement.

BEST COPY AVAILABLE

Research and Special Programs Administration

The Research and Special Programs Administration (RSPA) has multi-modal and trans-modal responsibilities. RSPA administers programs involving safety regulation, transportation preparedness, and research and development. Its primary missions require it to:

- Protect against the risks inherent in the transportation of hazardous materials by all modes, including pipelines;
- Ensure civil transportation preparedness in time of emergency;
- Conduct research on high-priority transportation problems and support the programs of the Department's operating administrations; and
- Design and sponsor transportation safety training programs for Federal, state and local government and industry personnel.

Hazardous Materials

RSPA is the national focal point for assuring safety in the domestic and international transportation of hazardous materials. During fiscal year 1982, RSPA sought to promote the establishment and enforcement of a national set of regulatory requirements, to strengthen state and local planning and management of hazardous materials accident prevention and response programs, and to diffuse the potentially disruptive conflicts surrounding the transportation of radioactive materials. In this regard, RSPA:

- Issued routing and driver training requirements for carriers of large-quantity radioactive materials.
- Issued a Departmental policy statement that defines the Federal, state and local government responsibilities for regulation of radioactive materials.
- Sponsored seven demonstration projects of practical information on the development of regional accident prevention and emergency response programs that can be used by other jurisdictions to suit their respective situations.
- Expanded the State Hazardous Materials Enforcement Development (SHMED) program to 16 states. The program provides Federal financial and technical incentives to participating states to adopt and enforce the Federal hazardous materials transportation regulations. This lays the groundwork for uniform application of a national set of regulatory standards.
- Moved toward adopting performance-oriented packaging standards for non-bulk hazardous materials, as recommended by the United Nations Committee of Experts, to replace existing specification standards.
- Eliminated 23 exemptions to existing regulations, bringing to 341 the total number of exemptions eliminated since the inception of the termination program in 1976. The termination program exists to convert the provisions of the exemptions into regulations of general applicability.

Pipeline Safety

RSPA also is charged with the responsibility for the safe transportation by pipeline of natural gas, liquefied natural gas, and hazardous liquids. It administers a regulatory and enforcement program to ensure the protection of the public safety through controls that are reasonable and workable for the regulated industry and conducts such research and development as is necessary to support its rulemaking and enforcement activities. Some of the key achievements of the pipeline safety program in fiscal year 1982 included:

- Administering the highly successful Federal/state cooperative regulatory and enforcement program for pipeline safety in which states, through the incentives of federal grants, are encouraged to assume enforcement responsibility for pipeline operators within their borders. This effectively extends the Federal regulatory influence in intrastate pipeline operations without a comparable increase in Federal resources. RSPA distributed a total of $2,406,000 in grants to 50 participating state agencies.
- Requiring gas pipeline operators to establish or participate in damage prevention programs to reduce the risk of excavation damage to buried pipelines.
- Publishing a guidance manual directed at the non-technically trained owners and operators of small gas systems. The manual provides a simplified and easy-to-follow general overview of compliance responsibilities under the Federal regulations.
- Deleting, as a result of RSPA regulatory review, several redundant or obsolete regulations.

Safety Training

Under the operational direction of RSPA, the Department's Transportation Safety Institute (TSI) continued to provide quality training programs in safety and security. During 1982, the Institute offered more than fifty different courses in transportation safety and security for Federal, state and local officials, as well as for industry and international officials. The courses included training

BEST COPY AVAILABLE

in accident investigation, regulatory compliance, system safety concepts, safety program management and evaluation, and regulations enforcement.

In response to the objectives of the executive branch to shift many Federal programs to the states and acting in concert with the several DOT sponsoring administrations, TSI increased the number of training courses conducted on-site around the nation. During 1982, approximately 80 percent of the 6,272-student total were trained at or near their work sites.

The following listing shows the sponsored programs at TSI and the 1982 attendance:

Program	*Resident*	*Nonresident*	*Total*
Aviation Safety	160	—	160
Hazardous Materials Transportation Safety	280	637	845
Highway Traffic Safety	53	313	366
Motor Carrier Safety	147	22	169
Pipeline Safety	191	1143	1334
Railroad Safety	194	971	1165
Transportation Security	129	624	753
Transportation Emergency Response	—	65	65
Urban Mass Transportation Safety & Security	136	1279	1415
TOTAL	1218	5054	6272

The Institute's staff is dedicated to the concept that quality safety training is one of the most effective ways to reduce fatalities, inquiries, and property damage in all facets of transportation. Training also is a viable alternative to expending additional funds in regulation enforcement. The Institute continued to demonstrate considerable flexibility in meeting the separate needs of its several DOT sponsors, and showed consistency in the high quality of its courses and seminars.

Emergency Transportation

RSPA administers an extensive Departmental civil emergency transportation program to provide for continuity of government and operational planning guidance in national and regional emergencies, including those affecting the national defense. The program supports the regional emergency transportation coordinators and their civil preparedness functions. Within the overall program are communications system development and extensive training activities for the Department's national defense executive reserve and mobilization designees, a fully organized force of approximately 500 professionals selected from the private sector and government. The force is available and qualified for executive positions in the Federal government in the event of an emergency.

RSPA is the Department's focal point for all civil emergency preparedness planning and management covering periods of international tension and for those natural or man-made disruptions that have an adverse impact on the nation's civil transportation system. The Administration:

- Conducted one national and 10 regional emergency preparedness training exercises and helped to develop and review nuclear power plant contingency plans;
- Completed negotiations for use of U.S. safe-haven facilities for certain non-U.S. NATO commercial airlift assets in support of the "common defense"; and
- Provided the chairman and the head of the U.S. delegation to the NATO Civil Aviation Planning Committee.

University Research

To help bring the resources of the academic community to bear on high priority problems critical to long-term national transportation planning, RSPA funds a program of university research. Some of the research projects sponsored in 1982:

- *Regulatory Reform Research.* Post-Motor Carrier Act of 1980 studies determined the impact of that legislation on small communities, demonstrating that little change has taken place in shipping and receiving conditions. RSPA also initiated studies to compare the experience in several states that have taken new and different approaches to motor carrier deregulation.
- *Maintenance and Construction.* The program sponsored a number of projects relating to transportation maintenance and construction, especially for highways and bridges. Recent studies of note included work on a technique to determine residual bridge life that is contributing to the development of a method to evaluate the quality of existing bridges and thus influence maintenance/replacement decisions. Additional studies were done on optimum allocation of maintenance funds.
- *Safety Research.* A study of industry-based strategies for motivating seat belt usage developed a highly successful motivational procedure. Its results were being adopted throughout the country. A continuing study focuses on a community model for handling hazardous materials transportation emergencies. Its aim is to get pertinent, reliable, facile information to small communities. Early findings were encouraging.
- *System Research.* New investments for transportation improvement, judiciously planned, will increase the tax base of a metropolitan area and thus help finance improvements. One study developed a computer-based forecasting tool that was incorporated in the Chicago Transit Area Transportation Study's routine planning process.

BEST COPY AVAILABLE

• *Materials Research.* The development of a new class of materials that may fulfill an urgent need for high-strength materials in transportation was made possible through a research contract on the "Development of Ultrahigh Carbon Steels for Transportation Application." The steels, superformable at intermediate temperatures, can be fabricated directly into intricate shapes.

Navigation

Telecommunication (radionavigation and radiocommunication systems) is a major factor in transportation system safety and efficiency.

The Secretary of Transportation is the principal Federal official for the provision of navigation support to the civilian sector of the United States. The FAA and Coast Guard are jointly responsible for operation of the system. RSPA coordinates long-range plans and is the principal executive agent for the Secretary in preparation of the Federal Radionavigation Plan.

Key accomplishments in navigation during the year:

• Releasing the second edition of the Federal Radionavigation Plan (FRP);

• Completing development of a three-dimensional model used in evaluating system performance and receiver design;

• Continuing development of a navigation system economic planning model and the updating and collection of the navigation user data base; and

• Conducting a DOT Surface Navigation Users Conference for user input to the FRP.

Transportation Information

RSPA coordinates Department-wide, transportation statistics, data and information to reduce costs by minimizing the resources the Department requires, maximizing the use of existing data and reducing the burden on the public to provide information.

Key accomplishments in 1982:

• The decision information display system went from a demonstration to an operational mode;

• The contents of a system (the transportation research information service network) that integrated transportation literature indexing, retrieval and documentation into a single network were published; and

• A transportation information reference file system of some 1,000 transportation data bases and sources was published.

Transportation Systems Center

The Transportation Systems Center (TSC) is the Department's multi-modal systems research and analysis organization. It supports the high priority technology and information requirements of the Secretary and the operating administrations, and provides the "technical bridge" between research and user communities and maintains close relationships with all Department elements through the participatory process used for defining and funding the Center's work.

During fiscal year 1982, in keeping with Administration policies and actions throughout government, the Center reduced its workforce by more than 10 percent. It reorganized offices to improve alignment with sponsoring organizations and eliminate a level of supervision.

Major TSC accomplishments:

Safety Information Systems. One of DOT's most important mandates is transportation safety. Each operating administration has safety regulation and analysis responsibilities related to its mode of transportation, including the collection, analysis, and reporting of accident statistics. TSC supports the operating administrations in development and improvement of safety information systems, and last year:

• Supported the Federal Railroad Administration by making improvements in the overall system and in the output report for the Rail Accident Incident Reporting System (RAIRS).

• Developed a Safety Information Reporting and Analysis System (SIRAS) for the Urban Mass Transportation Administration to document accidents on the nation's urban transit systems.

• Provided planning and data processing support to the Hazardous Materials Information System (HMIS) for the Materials Transportation Bureau. The system reports hazardous materials transportation incidents.

• Supported the Federal Aviation Administration in the development of an Aviation Safety Analysis System (ASAS) to integrate safety information about aircraft operation and maintenance and pilot certification.

• Supported the Coast Guard in enhancement of an information system for allocating emergency response resources to hazardous chemical spills in U.S. waters (Hazard Assessment Computer System—HACS—and Spill Cleanup Inventory System—SKIM).

• Supported the National Highway Traffic Safety Administration's structuring of data bases on the U.S. automobile population and motor vehicle accidents as part of efforts to improve the Fatal Accident Reporting System (FARS) and the National Accident Sampling System (NASS).

• Developed for the Coast Guard a shipyard accident and loss reporting system to be used in meeting Occupational Safety and Health Act reporting requirements.

BEST COPY AVAILABLE

- Completed an analysis of the management information and equipment requirements for the Coast Guard's search and rescue mission. A prototype command and control system is being developed in response to these requirements.
- Supported the national program to remove the drunk driver from the road through a research program for NHTSA to assess countermeasures used to reduce alcohol related accidents. TSC evaluated legal and punitive sanctions to determine the extent to which they deter first and subsequent offenders. TSC also examined countermeasures for reducing pedestrian accidents that involve alcohol.
- Applied its information system analysis and development capability to several management information systems within DOT operating elements and other Federal agencies, including the Federal Emergency Management Agency (FEMA).

The Grumman Flexible 870 Advanced Design Bus, introduced into revenue service in 1978, widely publicized structural failures. By December, 1980, 2,800 buses, funded through UMTA's Capital Assistance Program, were in service. Cracks in the primary structure were found by several bus operating organizations and 1,000 buses were withdrawn from service. The manufacturer initiated a retrofit and design modification program for objective technical information on which to base future decisions for capital assistance applications, UMTA asked TSC for an independent assessment of the adequacy of the structural modifications made by the manufacturer to the 870 bus. From the study, completed in January 1982, TSC concluded that the expected service life of the modified A-frame, trunnion, and engine cradle should exceed 500,000 miles, as required.

Also noteworthy for the fiscal year were continuing and expanded responsibilities in support of FRA, FAA, and OST. For FRA, the Center continued a nationally recognized program for development of track performance guidelines to minimize derailments relating to track failure. In support of FAA's planning to implement the National Airspace System Plan, TSC expanded its aviation responsibilities. The Office of the Secretary placed additional reliance on the Center's technical and management capabilities as TSC became involved in several functions of the Transportation Systems Acquisition Review Council.

BEST COPY AVAILABLE

BLANK PAGE

Appendix

BEST COPY AVAILABLE

TABLE I. U.S. Department of Transportation Budget Authority, Obligations, and Outlays, Fiscal Year 1982.

(dollars in millions)

Organization	*Budget Authority*	*Obligations*	*Outlays*
Office of the Secretary	39	37	37
United States Coast Guard	2,526[1]	2,271	2,077
Federal Aviation Administration	3,157	2,930	2,891
Federal Highway Administration	8,765	8,533	7,988
Federal Railroad Administration	1,216[2]	1,494[2]	1,501[2]
National Railroad Passenger Corporation	735	718	718
National Highway Traffic Safety Administration	177	177	220
Urban Mass Transportation Administration	3,532	3,789	3,864
Saint Lawrence Seaway Development Corporation	—	8	-1
Maritime Administration	435	427	651
Research and Special Programs Administration	17	16	23
Office of the Inspector General	14	13	13
SUBTOTAL	20,613	20,413	19,983
Proprietary Receipts from the Public	-66	—	-66
TOTALS	20,547	20,413	19,917

[1]Includes $300 million in Department of Defense funds.
[2]Includes $821 million for settlements of railroad litigation.

TABLE II. U.S. Department of Transportation Employment in Authorized Full-Time Permanent Positions, Fiscal Year 1982.

Organization	*Employment*
Office of the Secretary	868
United States Coast Guard	43,507[1]
Federal Aviation Administration	44,896
Federal Highway Administration	3,401
Federal Railroad Administration	1,176
National Highway Traffic Safety Administration	612
Urban Mass Transportation Administration	495
Saint Lawrence Seaway Development Corporation	162
Maritime Administration	1,068
Research and Special Programs Administration	636
Office of the Inspector General	421
TOTAL	97,242

[1] Includes 5,259 civilian and 38,248 military positions.

BEST COPY AVAILABLE

TABLE III. U.S. Department of Transportation Full-Time Civilian Minority and Female Employment, 1972–82.

Year	*Total* [1]	*Minority* [1]	*Percent*	*Total* [2]	*Female* [2]	*Percent*
1972	66,219	6,372	9.6	61,368	10,773	17.6
1973	65,227	6,248	9.6	61,851	10,316	16.7
1974	65,098	6,773	10.4	62,723	10,898	17.4
1975	68,241	7,647	11.2	64,588	11,373	17.6
1976	71,679	8,989	12.5	65,758	11,745	17.9
1977	72,809	9,573	13.1	74,289	12,833	17.3
1978	71,972	9,623	13.4	73,471	12,752	17.4
1979	71,040	9,807	13.8	72,139	12,650	17.5
1980	69,998	10,169	14.5	71,092	13,166	18.5
1981	58,018	9,325	16.1	58,220	12,093	20.7
1982	58,357	8,967	15.4	59,138	11,160	18.9

[1] Minority employment figures and related totals exclude employees in Hawaii and Guam.

[2] Female employment figures and related totals cover white collar positions only for the years 1972–75, general schedule positions only for the years 1971 and 1976, and all employees for the years 1977–80.

NOTES:

1. Minority data are as of May 31 for 1971–76 and September 30 for all other years .
2. Female data are as of May 31 for 1971 and 1976; October 31 for 1972–75; and September 30 for all other years.
3. Source of the data for 1972–75 was the Civil Service Commission.

BEST COPY AVAILABLE

TABLE IV. U.S. Coast Guard Financial Statement, Fiscal Year 1982.

Appropriated Funds	*Funds Available*[1]	*Total Obligations*	*Unobligated Balance*[2]
Operating Expenses	1,482,455,927	1,481,863,116	592,811
Acquisition, Construction & Improvements	766,877,169	451,626,128	315,251,041
Alteration of Bridges	12,566,045	4,404,902	8,161,143
Retired Pay	265,000,000	260,981,809	4,018,191
Reserve Training	52,351,000	51,887,149	463,851
Research, Development, Test and Evaluation	20,663,724	19,913,797	749,927
Pollution Fund	28,435,252	3,754,490	24,680,762
Offshore Oil Pollution Compensation Fund	27,976,851	697,721	27,279,130
Deepwater Ports	1,749,613	64,380	1,685,233
TOTAL	2,658,075,581	2,275,193,492	382,882,089
Reimbursements			
Operating Expense	26,149,744	26,149,744	—0—
Acquisition, Construction, & Improvements	2,475,603	169,731	2,305,872
Reserve Training	30,290	30,290	—0—
Research, Development, Test and Evaluation	1,358,168	1,287,638	70,530
TOTAL	30,013,805	27,637,403	2,376,402
Trust Funds			
Coast Guard General Gift Fund	141,043	54,448	86,595
Surcharge Collection, Sale of Commissary Stores	523,565	302,925	220,640
Coast Guard Cadet Fund	4,824,472	4,824,472	—0—
TOTAL	5,489,080	5,181,845	307,235
Intra Governmental Revolving Funds			
Coast Guard Supply Fund	90,372,721	89,941,714	431,007
Coast Guard Yard Fund	58,662,664	31,807,602	26,855,042
TOTAL	149,035,365	121,749,316	27,286,049

Accrued Gross Expenditures—All Years	*Total*	*Direct*	*Reimbursable*
Operating Expenses	1,468,583,006	1,441,321,646	27,261,420
Acquisition, Construction & Improvements	309,805,862	309,727,127	78,735
Alteration of Bridges	8,117,096	8,117,096	—0—
Retired Pay	260,477,224	260,477,224	—0—
Reserve Training	51,198,133	51,154,317	43,816
Research, Development, Test and Evaluation	20,602,039	19,934,228	667,811
Pollution Fund	6,266,388	6,266,388	—0—
Coast Guard General Gift Fund	54,356	54,356	—0—
Surcharge Collections, Sale of Commissary Stores	302,925	—0—	302,925
Coast Guard Cadet Fund	4,824,472	—0—	4,824,472
Coast Guard Supply Fund	89,656,823	—0—	89,656,823
Coast Guard Yard Fund	31,940,120	—0—	31,940,120
Offshore Oil Pollution Compensation Fund	720,106	720,106	—0—
Deepwater Ports Liability Fund	64,230	64,230	—0—
TOTAL	2,252,612,840	2,097,836,718	154,776,122

BEST COPY AVAILABLE

TABLE IV. U.S. Coast Guard Financial Statement, Fiscal Year 1982 (concluded).

[1] Funds available include unobligated balances brought forward from prior year appropriations as follows:

Alteration of Bridges	1,566,045
Acquisition, Construction, and Improvements	
Appropriated Funds	81,982,499
Reimbursements	243,898
Research, Development, Test & Evaluation	
Appropriated Funds	264,524
Reimbursements	144,269
Deepwater Ports Liability Fund	181,115
Pollution Fund	20,172,061
Coast Guard General Gift Fund	131,534
Surcharge Collections, Sale of Commissary Stores	251,179
Coast Guard Supply Fund	443,586
Coast Guard Yard Fund	23,569,361
Offshore Oil Pollution Compensation Fund	17,802,923
TOTAL	146,752,994

[2] Unobligated balances remain available for obligation in fiscal year 1983 as follows:

Acquisition, Construction & Improvements	317,352,232
Research, Development, Test & Evaluation	820,457
Alteration of Bridges	8,161,143
Pollution Fund	24,680,762
Coast Guard General Gift Fund	86,595
Surcharge Collections, Sale of Commissary Stores	220,640
Coast Guard Supply Fund	431,007
Coast Guard Yard Fund	26,855,042
Offshore Oil Pollution Compensation Fund	27,279,130
Deepwater Ports Liability Fund	1,685,233
TOTAL	407,572,241

BEST COPY AVAILABLE

TABLE V. Hijacking Attempts on U.S. and Foreign Aircraft, Including General Aviation Aircraft, Calendar Years 1971–81.

Aircraft Category	Year										
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
U.S.	27	31	2	7	12	4	6	13	13	22	8
Foreign	31	31	20	19	13	14	26	18	14	19	24
TOTAL	58	62	22	26	25	18	32	31	27	41	32

TABLE VI. U.S. Airline Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1972–81.

Year	Accidents		Fatalities	Aircraft Hours Flown	Accident Rates[1]	
	Total	Fatal			Total	Fatal
1972	46	7	186	5,659,485	0.813	0.124
1973	36	8	221	5,898,575	0.610	0.136
1974	43	7	460	5,474,495	0.767	0.110
1975	31	2	122	5,422,665	0.571	0.037
1976	22	2	38	5,857,601	0.394	0.036
1977	21[2]	3	78	5,800,843	0.362	0.052
1978	21[2]	5[2]	160	6,031,743	0.348	0.083
1979	24[3]	4	351	6,700,322	0.358	0.060
1980	15	0	0	6,990,000	0.215	0.000
1981	25[4]	4	4	6,571,288	0.380	0.061

[1] Per 100,000 aircraft hours flown.

[2] Includes one accident involving a scheduled commercial operator.

[3] Includes one accident involving a scheduled commercial operator and one accident involving a deregulated all cargo air carrier.

[4] Includes two accidents involving deregulated all cargo air carriers.

NOTE: Beginning in 1981, the National Transportation Safety Board discontinued the practice of citing passenger fatality rates.

BEST COPY AVAILABLE

TABLE VII. U.S. Commuter Air Carrier Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1977–81.

Year	Accidents		Fatalities	Aircraft Hours Flown	Accident Rates[1]	
	Total	Fatal			Total	Fatal
1977	42	9	33	1,143,651	3.67	0.79
1978	55	13	47	1,288,480	4.27	1.01
1979	51	14	65	1,261,500	4.04	1.11
1980	37	7	36	1,263,200	2.93	0.55
1981	31	9	34	1,240,764	2.50	0.73

[1] Per 100,000 aircraft hours flown.

TABLE VIII. U.S. Air Taxi Accidents, Fatalities, Aircraft Hours Flown, and Accident Rates, Calendar Years 1977–81.

Year	Accidents		Fatalities	Aircraft Hours Flown	Accident Rates[1]	
	Total	Fatal			Total	Fatal
1977	175	35	122	3,063,749	5.71	1.14
1978	216	57	160	3,135,121	6.89	1.82
1979	173	36	84	3,373,901	5.13	1.07
1980	164	42	88	3,535,466	4.64	1.19
1981	157	40	94	2,895,827	5.42	1.38

[1] Per 100,000 aircraft hours flown.

BEST COPY AVAILABLE

TABLE IX. U.S. General Aviation Accidents, Fatalilities, Aircraft Hours Flown, And Accident Rates, Calendar Years 1972–81.

Year	Accidents		Fatalities	Aircraft Hours Flown	Accident Rates[1]	
	Total	Fatal			Total	Fatal
1972	4109	653	1305[2]	24,419,000	16.8	2.67
1973	4090	679	1299	26,907,800	15.2	2.52
1974	4234	689	1327	27,773,500	15.2	2.47
1975	4034	638	1247	28,335,700	14.2	2.24
1976	4005	648	1187	29,975,200	13.3	2.15
1977	4069	658	1281	31,584,600	12.9	2.08
1978	4223	723	1563[3]	34,985,399	12.1	2.07
1979	3800	629	1219	38,767,418	9.8	1.62
1980	3597	622	1252	36,401,663	9.88	1.71
1981	3502	654	1282	36,803,200	9.52	1.78

[1] Per 100,000 aircraft hours flown.

[2] Includes 5 air carrier fatalities resulting from a collision with a general aviation aircraft.

[3] Includes 142 air carrier fatalities resulting from a collision with a general aviation aircraft.

NOTE:

1. As of 1981, general aviation no longer included commuter air carrier and air taxi aircraft. The number of accidents, fatalities, aircraft hours flown, and accident rates for the years 1972–80 have been adjusted to exclude air taxi data.
2. Suicide and sabotage accidents are included in all computations except accident rates. The number of accidents included are: (1972–3, 1973–2, 1974–2, 1975–2, 1976–4, 1977–1, 1978–2, 1979–0, 1980–1, 1981–0.

TABLE X. Federal-Aid Highway Obligations, Fiscal Years 1972–82.

(dollars in millions)

Funding Category	Year											
	1972	1973	1974	1975	1976*	1977	1978	1979	1980	1981	1982	TOTAL
Interstate	3,293	2,633	2,901	4,015	2,616	3,298	3,191	4,442	3,380	3,926	3,659	37,354
ABC[1]	1,036	698	516	425	194	46	17	7	—	—	—	2,939
Primary[2]	60	69	620	1,266	725	1,174	1,320	1,440	1,605	1,752	1,489	11,520
Secondary[3]	42	45	285	483	332	287	364	360	395	456	387	3,436
Urban	11	84	340	368	564	657	854	739	774	892	732	6,015
Bridge	41	53	38	181	116	196	171	611	770	983	979	4,094
Safety Construction	—	—	25	263	368	326	332	338	344	338	318	2,652
Emergency Relief	44	145	149	144	115	85	105	135	280	122	120	1,444
Other[r]	442	398	312	599	1,127	896	781	552	529	551	505	6,692
TOTAL[r]	4,969	4,125	5,186	7,744	6,157	6,965	7,135	8,624	8,077	8,975	8,189	76,146

[1] Prior to fiscal year 1975, ABC figures include primary, secondary, and urban funds. After fiscal year 1974, ABC figures include urban extension, primary, and secondary funds.

[2] Prior to fiscal year 1975, primary figures include rural primary and priority funds. After fiscal year 1974, primary figures include rural primary, priority primary, discretionary priority primary, and consolidated primary funds.

[3] Secondary figures include only rural secondary funds.

* Includes the Transition Quarter, July 1, 1976 to September 30, 1976.

[r] Revised

BEST COPY AVAILABLE

TABLE XI. Federal Highway Administration Motor Carrier Safety Inspection Activity, Calendar Years 1974–82.

Year	*Inspections Performed*	*Vehicles Taken Out of Service*	*Drivers Taken Out of Service*
1974	25,939	7,867	688
1975	16,372	4,961	425
1976	16,907	5,574	456
1977	18,730	6,985	558
1978	25,695	9,978	597
1979	26,127	10,779	1,980
1980	29,110	9,600	3,000
1981	40,747	13,143	4,184
1982	35,825	11,489	3,160

TABLE XII. Summary of U.S. Train Accidents and Casualties, Calendar Years 1974–82.

	Year									*% Change*	
Category	*1974*	*1975*	*1976*	*1977*	*1978*	*1979*	*1980*	*1981*	*1982*	*1981–82*	*1977–82*
Number of Train Accidents[1]											
Collisions	1,551	1,002	1,370	1,363	1,476	1,425	1,201	776	572	-26.3	-58.0
Derailments	8,513	6,328	7,934	8,075	8,763	7,482	6,442	4,366	3,383	-22.5	-58.1
Other	630	711	944	926	1,038	833	808	639	634	- 0.8	-31.5
TOTAL TRAIN ACCIDENTS	10,694	8,041	10,248	10,362	11,277	9,740	8,451	5,781	4,589	-20.6	-55.7
Number of Casualties in Accidents of all Types											
Trespassers Killed	565	524	457	458	492	516	566	582	501	-13.9	- 9.4
Trespassers Injured	674	703	766	689	746	805	728	761	671	-11.8	+ 2.6
Passengers Killed	7	8	5	4	13	6	4	4	9	+125.0	+125.0
Passengers Injured	574	1,307	998	503	1,252	1,001	593	409	387	- 5.4	-23.0
Employees on Duty Killed	140	110	100	114	122	101	97	65	78	+20.0	-31.6
Employees on Duty Injured[2]	15,620	47,318	57,889	61,028	65,071	66,924	56,331	47,838	36,032	-24.7	-41.0
All Other Persons Killed	1,196	918	1,068	954	1,019	806	750	633	531	-16.1	-44.3
All Other Persons Injured	3,950	4,978	5,678	5,647	5,476	5,396	4,594	3,995	3,185	-20.3	-43.6
TOTAL NUMBER OF PERSONS KILLED	1,908	1,560	1,630	1,530	1,646	1,429	1,417	1,284	1,119	-12.9	-26.9
TOTAL NUMBER OF PERSONS INJURED[3]	20,818	54,306	65,331	67,867	72,545	74,126	62,246	53,003	40,275	-24.0	-40.5

[1] Monetary reporting threshold prior to 1975 was $750, in 1975 it was increased to $1,750, in 1977 it was increased to $2,300, 1979 to $2,900, and 1981 to $3,700.

[2] Includes lost time cases only prior to 1975. Reporting requirements were changed in 1975 to be comparable to OSHA reporting requirements, including cases with lost or restricted time; those requiring medical treatment beyond first aid; termination of employment; transfer to another job; loss of consciousness; and occupational illnesses.

[3] Includes occupational illnesses.

BEST COPY AVAILABLE

TABLE XIII. Summary of Accidents and Casualties at Public Rail-Highway Crossings, Calendar Years 1974–82.

Accidents [1] and Casualties [2]	Year									% Change	
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1981–82	1977–82
Accidents at Highway Grade Crossings Involving Motor Vehicles											
Total Accidents	3,089	10,925	11,700	11,849	11,999	11,108	9,422	8,232	6,882	-16.4	-41.9
Number of Persons Killed	1,128	788	978	846	929	727	708	623	526	-15.6	-37.8
Number of Persons Injured	3,166	3,600	4,343	4,455	4,120	4,019	3,534	3,020	2,117	-20.9	-45.7
Total Rail-Highway Grade Crossing Accidents and Resulting Casualties											
Total Accidents	3,278	11,354	12,144	12,299	12,435	11,552	9,763	8,546	7,158	-16.2	-41.8
Number of Persons Killed	1,220	978	1,114	944	1,021	834	788	697	580	-16.8	-38.6
Number of Persons Injured	3,260	4,168	4,831	4,649	4,256	4,172	3,662	3,121	2,508	-19.6	-46.1
Railroad Casualties											
Passengers on Trains											
Number of Persons Killed	0	1	0	0	0	0	0	0	0	—	—
Number of Persons Injured	18	96	57	25	18	2	24	4	1	-75.0	-96.0
Employees on Duty											
Number of Persons Killed	3	5	5	11	2	7	0	1	3	200.0	-72.7
Number of Persons Injured	102	117	195	202	180	160	122	110	116	5.5	-42.6
Total Railroad Casualties											
Number of Persons Killed	3	6	5	11	2	7	0	1	3	200.0	-72.7
Number of Persons Injured	120	213	252	227	198	162	146	114	117	2.6	-48.5

[1] All impacts between on-track equipment and highway users were reported beginning in 1975. Prior to 1975, such impacts were reported only if they resulted in a reportable casualty or in $750 in damages to railroad on-track equipment, signals, track, track structures, or roadbed.

[2] Include lost time cases only prior to 1975. Reporting requirements were changed in 1975 to be comparable to OSHA reporting requirements—including cases with lost or restricted time; those requiring medical treatment beyond first aid; termination of employment; transfer to another job; loss of consciousness; and occupational illnesses.

BEST COPY AVAILABLE

TABLE XIV. Alaska Railroad Revenue Freight Traffic, by Commodity, Fiscal Years 1975–82.

Commodity	Revenue Freight Tons (000's)								% Change	
	1975	1976	1977	1978	1979	1980	1981	1982	1981–82	1975–82
Sand and Gravel	1.0	104.3	699.5	727.2	637.5	396.2	1,796.8	2,753.8	+53.26	N/C
Coal	584.0	606.9	550.0	593.3	523.9	590.2	653.0	653.6	+ 0.09	+11.92
Petroleum, Oil, and Lubricants	557.4	632.6	532.3	373.9	219.6	251.7	379.1	439.4	+15.91	-21.17
TOFC/COFC (Piggyback)	95.3	114.2	99.7	99.5	88.7	92.4	112.5	122.4	+ 8.80	+28.44
Forest Products	119.5	124.3	82.0	67.8	55.2	108.8	100.7	77.0	-23.54	+35.56
Agricultural Products	13.2	9.1	11.5	8.2	7.1	9.9	8.1	6.8	-16.05	-48.48
Manufactured Goods and Miscellaneous Commodities	491.6	596.3	330.3	307.8	276.9	292.1	311.9	449.9	+44.25	- 8.48
TOTAL TONNAGE	1,862.0	2,188.0	2,305.3	2,177.7	1,805.9	1,741.3	3,362.1	4,502.9	+33.93	+141.83

N/C – Not Comparable. Sand and Gravel hauled in 1982 exceeded the total of the six years of 1975 - 1980.

TABLE XV. Amtrak Passengers, Passenger Miles, Daily Train Miles, Revenues, Costs, Deficit and Ratios, Fiscal Years 1972–82.

Category	Year											%Change	
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1981–82	1972–82
Passengers (millions)	13.7	14.7	16.7	15.8	16.9	19.2	18.9	21.4	21.2	20.2	19.0	- 7.8	+38.69
Passenger Miles (billions)	2.9	3.3	4.4	3.7	3.8	4.3	4.0	4.9	4.6	4.8	4.2	-12.5	+44.83
Daily Train Miles (thousands)	71.5	72.9	77.0	80.8	85.7	86.7	86.4	86.5	81.1	84.1	78.5	- 7.4	+ 9.79
Operating Revenue ($ millions)	162.5	177.3	240.1	246.5	277.8	311.2	313.0	381.3	436.8	612.2	630.7	+10.4	+265.3
Corporate Costs ($ millions)	66.9	44.8	24.9	35.6	56.4	56.8	60.2	45.3	50.5	84.1	145.2	+69.4	+113.0
Operating Costs ($ mulions)	239.3	274.4	413.2	524.2	665.8	784.2	830.1	952.8	1,102.8	1,252.5	1,280.6	- 5.3	+395.6
Total Costs ($ millions)	310.1	319.2	438.1	559.8	715.5	842.4	890.3	998.1	1,153.3	1,336.6	1,425.8	- 0.6	+333.9
Deficit [1] ($ millions)	147.6	141.9	195.9	313.3	437.7	531.2	577.3	616.8	716.5	724.4	795.1	+ 2.0	+402.1
Revenue/Costs Ratio [2]	0.527	0.558	0.563	0.456	0.405	0.386	0.365	0.415	0.431	0.421	.50	+15.5	- 5.5
Federal Subsidy Per Passenger Mile (¢)	5.3	4.2	4.4	8.3	10.9	12.7	14.4	12.6	15.6	14.6	13.2	- 1.4	+149.1

[1] Deficit before federal operating payments, but after state subsidies.

[2] Interest and depreciation removed from Total Costs before calculating the ratio.

BEST COPY AVAILABLE

TABLE XVI. Summary of U.S. Motor Vehicle Activities and Fatalities, Calendar Years 1972–82.

Year	*Licensed Drivers (millions)*	*Registered Motor Vehicles (millions)*	*Vehicle Miles Traveled (billions)*	*Traffic Fatalities* [1]	*Fatality Rate* [2]
1972	118.4	122.6	1,260	54,589	4.33
1973	121.6	130.0	1,313	54,052	4.12
1974	125.6	134.9	1,281	45,196	3.53
1975	129.8	137.9	1,328	44,525	3.35
1976	134.0	142.5	1,402	45,523	3.25
1977	138.1	147.3	1,467	47,878	3.26
1978	140.8	153.6	1,545	50,331	3.26
1979	143.3	157.3	1,529	51,093	3.34
1980	145.3	161.6	1,528	51,091	3.34
1981	147.1	164.1	1,556	49,301	3.17
1982	150.3	165.2	1,592	43,945	2.76
% Change 1972–82	+26.9	+34.7	+26.3	-19.5	-36.3
% Change 1981–82	+ 2.2	+ 0.7	+ 2.3	-10.9	-12.9

[1]Deaths attributable to motor vehicle accidents and occurring within 30 days after the accidents.
[2]Fatalities per 100 million vehicle miles.

BEST COPY AVAILABLE

TABLE XVII. Summary of U.S. Monthly Traffic Fatalities, Motor Vehicle Mileage, and Fatality Rates, Calendar Years 1977–82.

Category and Year	Month											
	Jan	*Feb*	*Mar*	*Apr*	*May*	*June*	*July*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*
Fatalities[1]												
1977	2,738	2,877	3,497	3,730	4,060	4,320	4,960	4,586	4,250	4,560	4,148	4,152
1978	2,733	2,657	3,511	3,950	4,384	4,633	4,999	4,998	4,782	4,795	4,385	4,504
1979	3,075	3,113	4,072	4,123	4,376	4,505	4,663	4,706	4,698	4,665	4,373	4,721
1980	3,432	3,271	3,645	3,731	4,482	4,935	4,848	5,401	4,498	4,350	4,257	4,241
1981	3,579	3,383	3,654	3,959	4,210	4,343	4,815	4,924	4,252	4,258	3,962	3,958
1982	2,888	2,768	3,305	3,523	3,886	3,826	4,293	4,220	3,947	4,094	3,520	3,675
% Change 1977–82	+ 5.5	−3.8	− 5.5	−5.5	−4.3	−11.4	−13.4	− 8.0	−7.1	−10.2	−15.1	−11.5
% Change 1981–82	−19.3	−18.2	−9.6	−11.0	−7.7	−11.9	−10.8	−14.3	−7.2	−3.9	−11.2	−7.2
Mileage[2]												
1977	102.7	102.7	120.3	121.8	129.2	129.6	136.5	136.7	124.5	127.7	118.8	116.5
1978	109.6	106.8	124.8	122.5	134.1	138.6	147.9	149.1	131.1	132.6	123.4	124.3
1979	114.4	109.7	131.4	125.9	132.4	131.2	134.9	139.9	127.6	131.6	123.4	123.2
1980	117.0	107.8	125.8	126.3	131.9	132.3	136.9	139.3	128.1	133.2	124.0	125.4
1981	116.5	110.2	128.3	129.0	134.8	136.1	141.8	144.0	131.7	133.7	125.3	124.9
1982	109.8	107.5	128.2	129.8	140.3	142.1	152.2	153.3	136.3	138.8	127.1	127.1
% Change 1977–82	+6.9	+4.7	+6.6	+6.6	+8.6	+9.6	+11.5	+12.1	+9.5	+8.7	+7.0	+9.1
% Change 1981–82	−5.8	−2.5	−0.1	+0.6	+4.1	+4.4	+7.3	+6.5	+3.5	+3.8	+1.4	+1.8
Fatality Rate[3]												
1977	2.67	2.80	2.91	3.06	3.14	3.33	3.63	3.36	3.41	3.57	3.49	3.56
1978	2.49	2.49	2.81	3.23	3.27	3.34	3.38	3.35	3.65	3.62	3.55	3.62
1979	2.69	2.84	3.10	3.27	3.31	3.43	3.46	3.36	3.68	3.54	3.54	3.83
1980	2.93	3.03	2.90	2.95	3.40	3.73	3.54	3.88	3.51	3.27	3.43	3.38
1981	3.07	3.07	2.85	3.07	3.12	3.19	3.40	3.42	3.23	3.18	3.17	3.17
1982	2.63	2.57	2.58	2.71	2.77	2.69	2.82	2.75	2.90	2.95	2.77	2.89
% Change 1977–82	−1.5	−8.2	−11.3	−11.4	−11.8	−19.2	−22.3	−18.2	−15.0	−17.4	−20.6	−18.8
% Change 1981–82	−14.3	−16.3	−9.5	−11.7	−11.2	−15.7	−17.1	−19.6	−10.2	−7.2	−12.6	−8.8

[1] Deaths attributable to motor vehicle accidents and occurring within 30 days after the accidents.
[2] Billions of vehicle miles.
[3] Fatalities per 100 million vehicle miles.

Sources: Vehicle Mileage—Highway Statistics Division, FHWA. Mileage is based on estimates from automatic traffic recorder data supplied to FHWA. Fatalities—Fatal Accident Reporting System, NHTSA.

BEST COPY AVAILABLE

TABLE XVIII. Summary of Reported Gas Pipeline Failures and Casualties, Calendar Years 1972–82.

	Distribution Lines			*Transmission and Gathering Lines*			*Totals*		
Year[1]	*Failures*	*Fatalities*	*Injuries*	*Failures*	*Fatalities*	*Injuries*	*Failures*	*Fatalities*	*Injuries*
1972	884	28	294	409	6	36	1,293	34	330
1973	893	33	333	471	2	19	1,364	35	352
1974[1]	1,017	20	314	460	4	20	1,477	24	334
1975	979	8	220	394	6	17	1,373	14	237
1976	1,036	53	319	543	10	47	1,579	63	366
1977	1,530	29	420	466	7	30	1,996	36	450
1978	1,555	20	320	533	11	86	2,088	31	406
1979	1,520	33	313	450	12	93	1,970	45	406
1980	1,467	9	269	529	2	41	1,996	11	310
1981	1,128	10	73	495	6	6	1,623	16	79
1982	1,189	20	222	520	10	41	1,709	30	263

[1] Figures for years after 1973 include information from telephone reports which were not included in 1972 and 1973 figures.

TABLE XIX. Summary of Reported Liquid Pipeline Accidents and Casualties, Calendar Years 1972–82.

Year	*Accidents*	*Fatalities*	*Injuries*	*Commodity Loss (Barrels)*
1972	309	8	19	360,654
1973	273	7	8	379,365
1974	256	10	11	293,643
1975	255	7	15	319,423
1976	209	5	5	255,037
1977	238	3	19	228,429
1978	256	3	10	280,794
1979	251	4	13	548,669
1980	219	3	12	289,445
1981	239	5	32	214,384
1982	200	0	6	221,411

BEST COPY AVAILABLE

TABLE XX. Hazardous Materials Incidents, by Mode, Calendar Year 1972–82.

Year	*Air*	*Highway (for hire)*	*Highway (private)*	*Railway*	*Water*	*Other*	*Total*
1972	33	3,558	342	333	9	53	4,328
1973	49	5,048	419	409	12	65	6,002
1974	157	7,251	361	616	26	17	8,428
1975	152	8,988	903	676	32	18	10,769
1976	90	10,223	549	982	13	32	11,889
1977	130	13,000	1,250	1,500	50	20	15,950
1978	231	15,983	565	1,191	47	5	18,022
1979	284	15,355	623	1,215	34	13	17,524
1980	233	14,042	442	1,327	42	29	16,115
1981	160	7,441	263	1,131	7	58	9,060
1982	97	5,324	323	831	9	3	6,587

TABLE XXI. Hazardous Materials Casualties (Deaths and Injuries), by Mode, Calendar Year 1972–82.

Year	*Air*	*Highway (for hire)*	*Highway (private)*	*Railway*	*Water*	*Other*	*Total*
1972	0	198	55	59	0	0	306
1973	6	308	45	155	3	13	530
1974	9	257	42	606	17	4	935
1975	4	402	112	96	2	66	682
1976	4	580	53	200	1	0	838
1977	9	461	77	234	0	0	781
1978	43	550	64	508	10	1	1,176
1979	13	620	95	228	1	2	959
1980	8	438	57	131	1	3	638
1981	7	392	32	221	0	18	670
1982	0	87	18	36	1	0	142

BEST COPY AVAILABLE

TABLE XXII. Selected Maritime Data, Fiscal Year 1980—82.

Activity	*1980*	*1981*	*1982*
Construction Differential Subsidies			
Number of new ships contracted for	0	3	0
Total ships under construction	29	31	12
Total expenditures (millions of dollars)	265.1	208.1	185.0
Operating Differential Subsidies			
Companies with long-term contracts	20	22	23
Ships covered	163	163	168
Total subsidy paid (millions of dollars)	335.0	334.6	400.2
Companies in Soviet Grain Program			
Ships covered under ODS contracts[1]	41	31	0
Total subsidy paid (millions of dollars)[2]	6.4	0.3	0.4
Ship Financing Guarantees			
Vessels Covered	2,782	3,313	4,358
Shipboard lighters covered	2,118	2,118	2,118
Principal covered by guarantees (millions of dollars)	7,214.9	7,935.6	8,123.6
Government Owned Ships In The National Defense Reserve Fleet	324	326	302
U.S.-Flag Oceanborne Trade			
Long tons carried in U.S.-flag ships (millions of tons)	28.2	34.2	N/A
Percent of foreign trade carried in U.S.-flag ships	3.7	4.5	N/A

[1] Calendar year basis
[2] Includes prior year activities
N/A Data not available

BEST COPY AVAILABLE

FIGURE 1. U.S. Department of Transportation Obligations, Fiscal Year 1982.

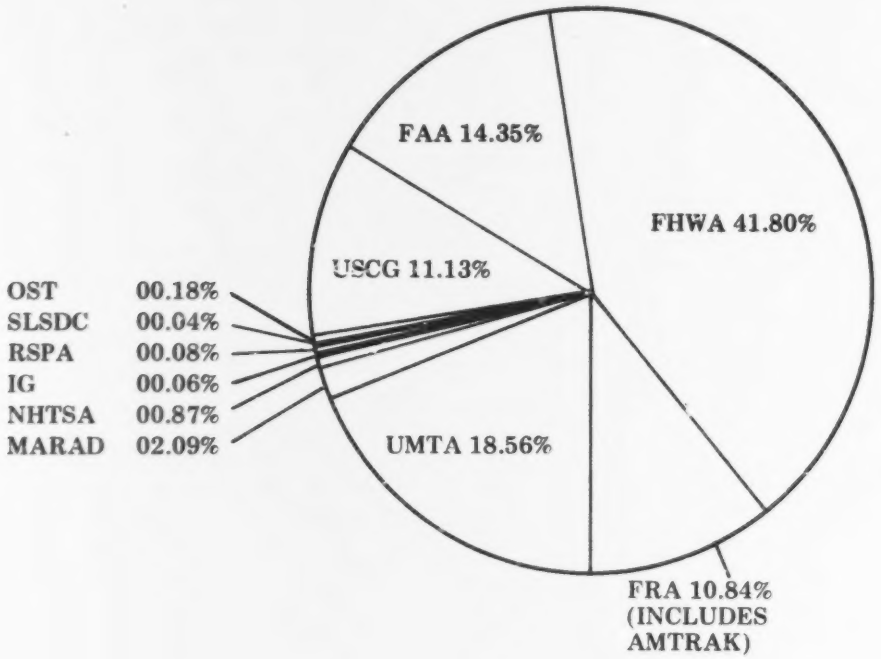
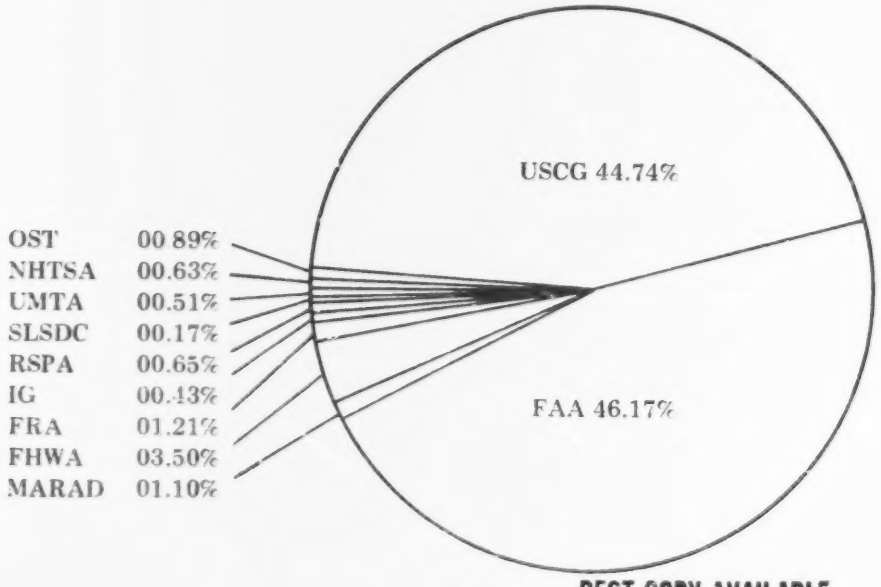
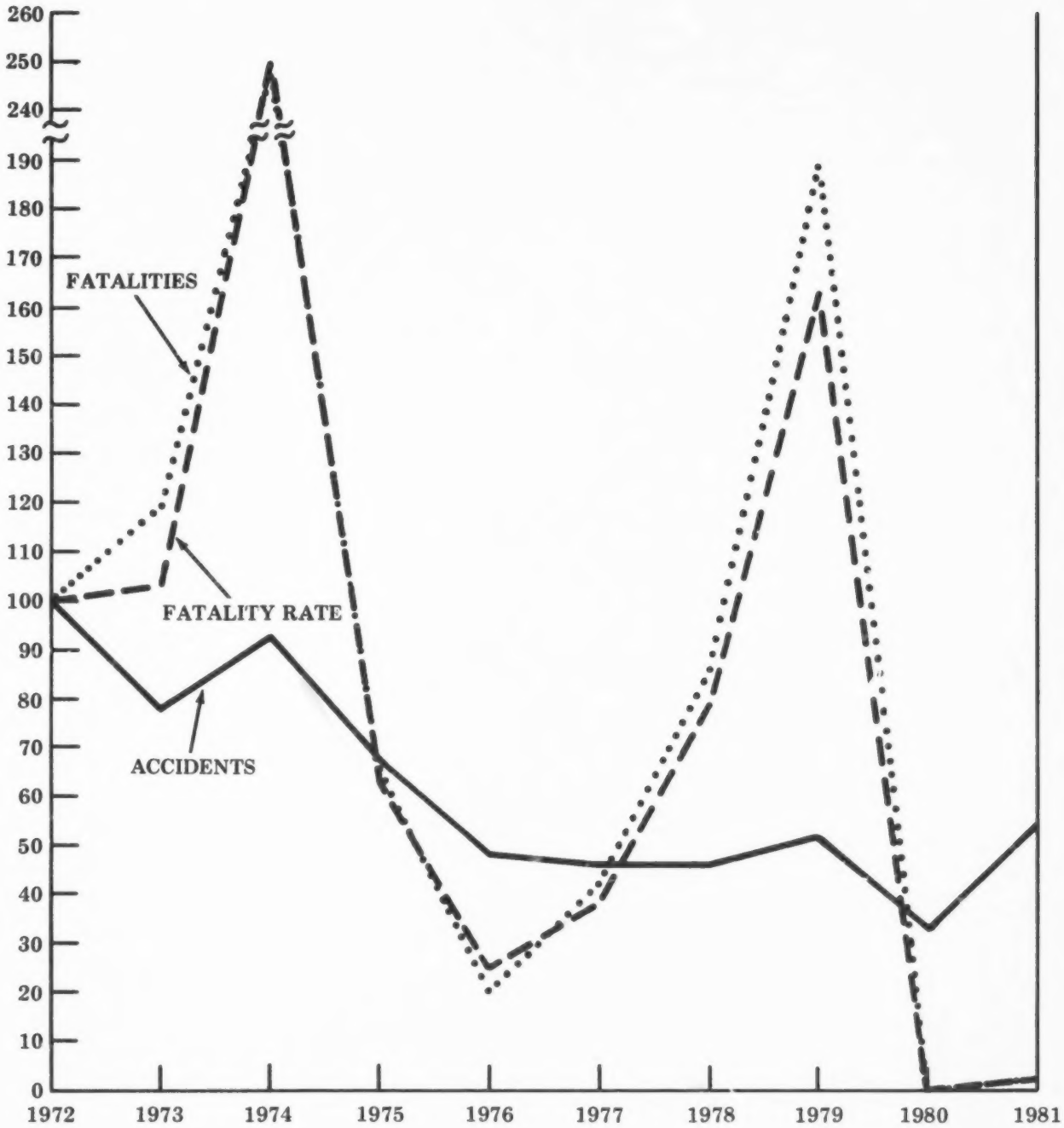


FIGURE 2. U.S. Department of Transportation Employment in Authorized Full-Time Permanent Positions, Fiscal Year 1982.



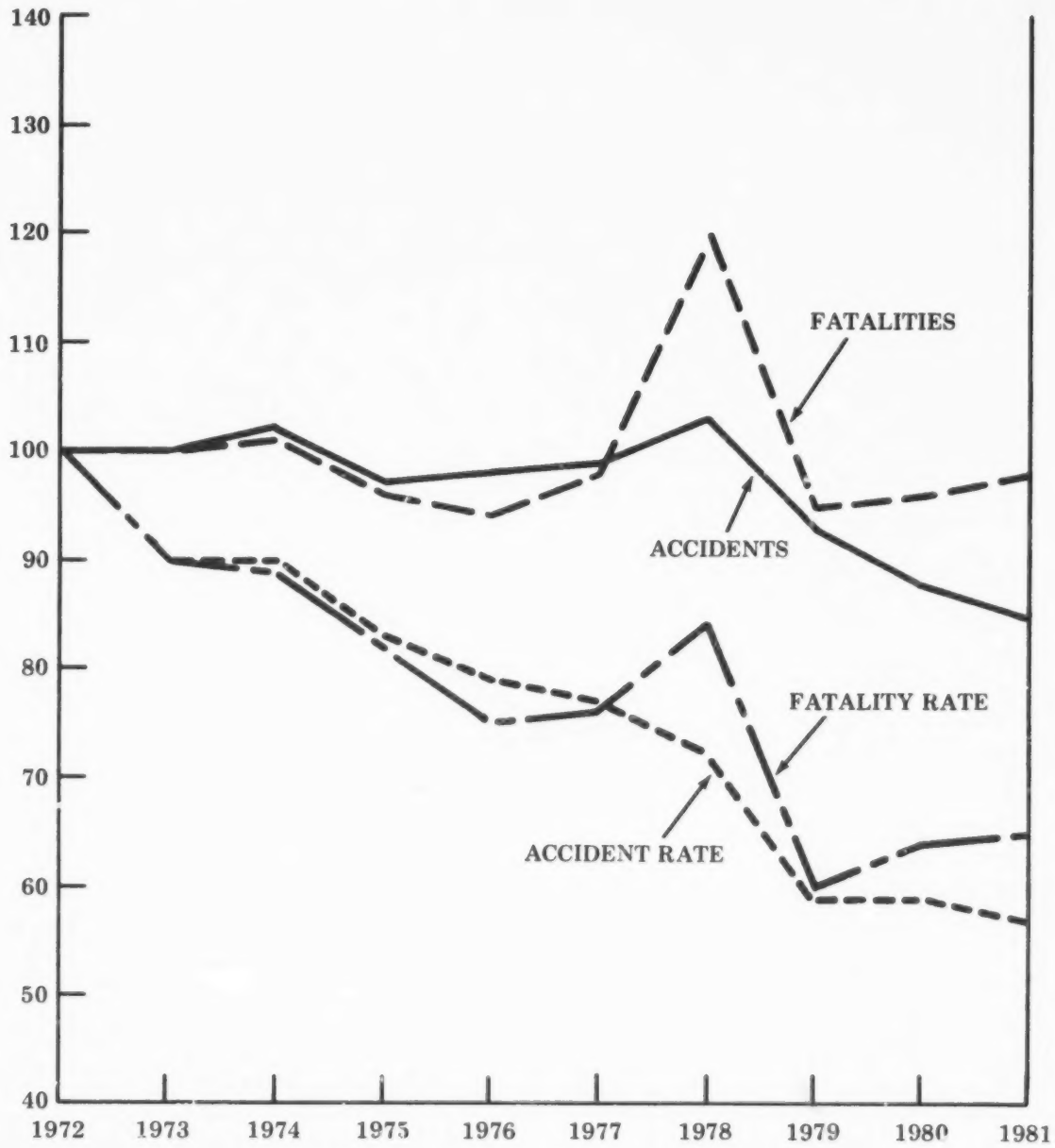
BEST COPY AVAILABLE

FIGURE 3. Relative Changes in U.S. Air Carrier Accidents, Fatalities and Fatality Rate, Calendar Years 1972-1981.



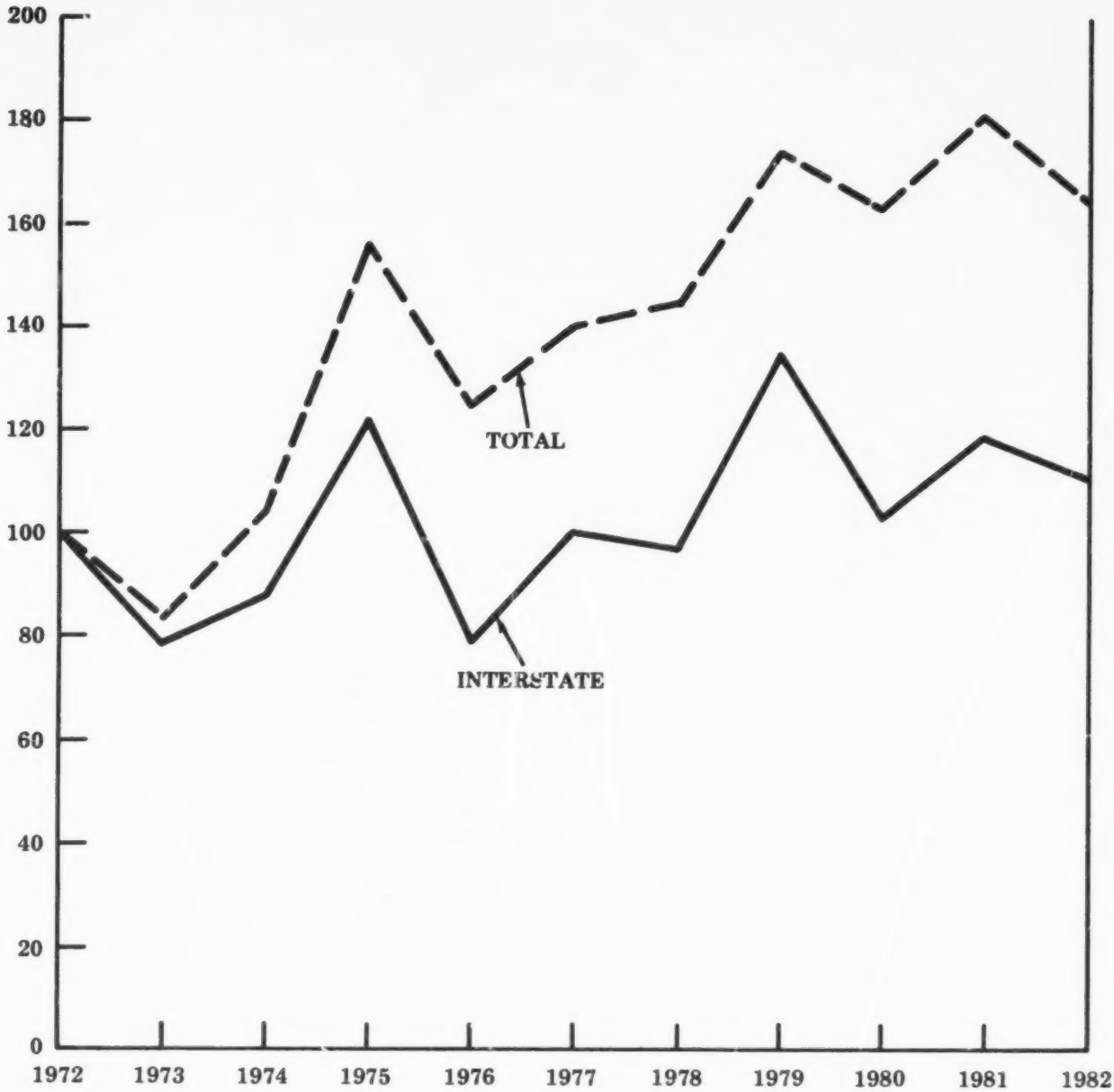
REST COPY AVAILABLE

FIGURE 4. Relative Changes in General Aviation Accidents, Fatalities and Accident and Fatality Rates, Calendar Years 1972-1981.



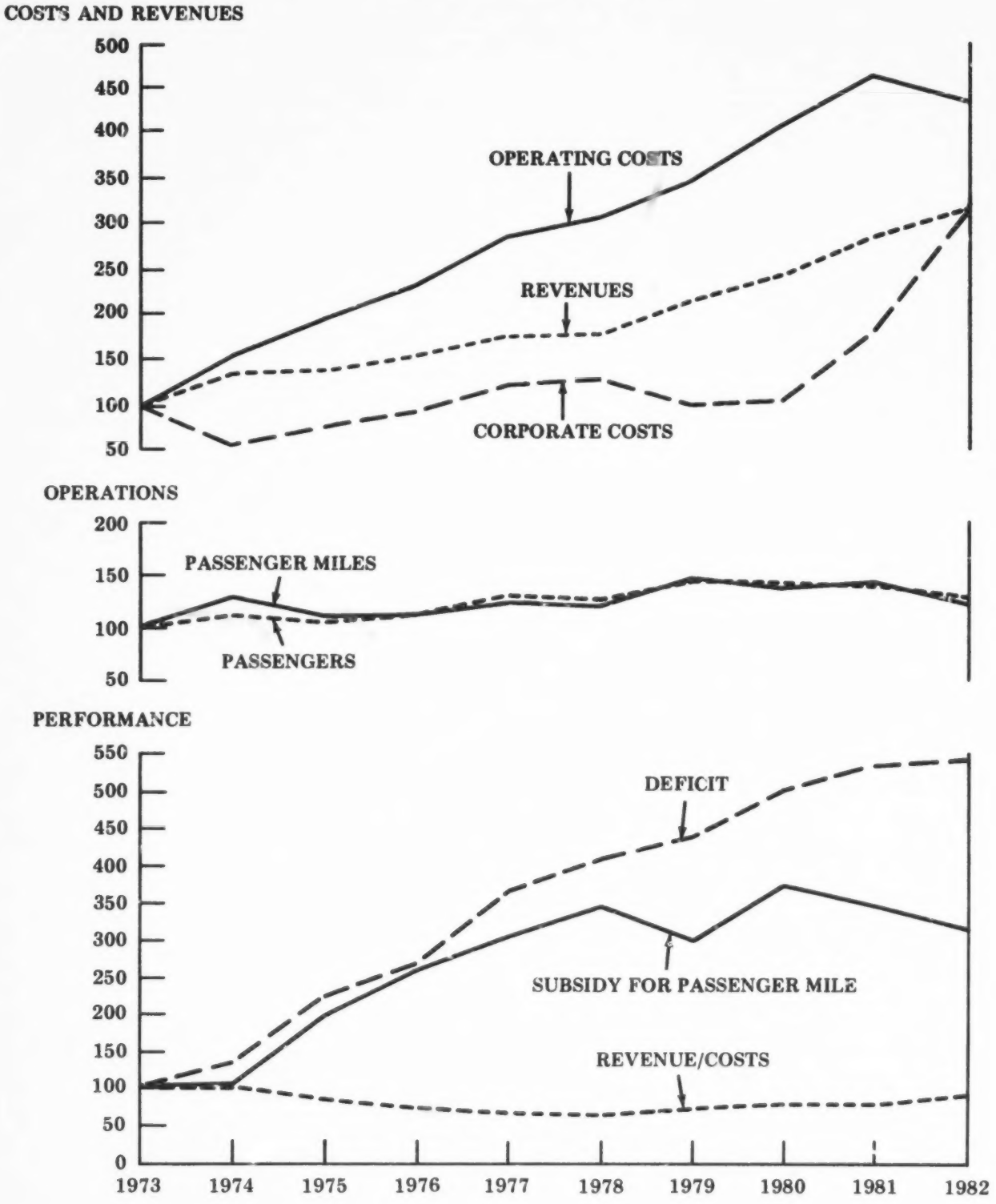
REST COPY AVAILABLE

FIGURE 5. Relative Changes in Total and Interstate System Highway Obligations, Fiscal Years 1972-1982.



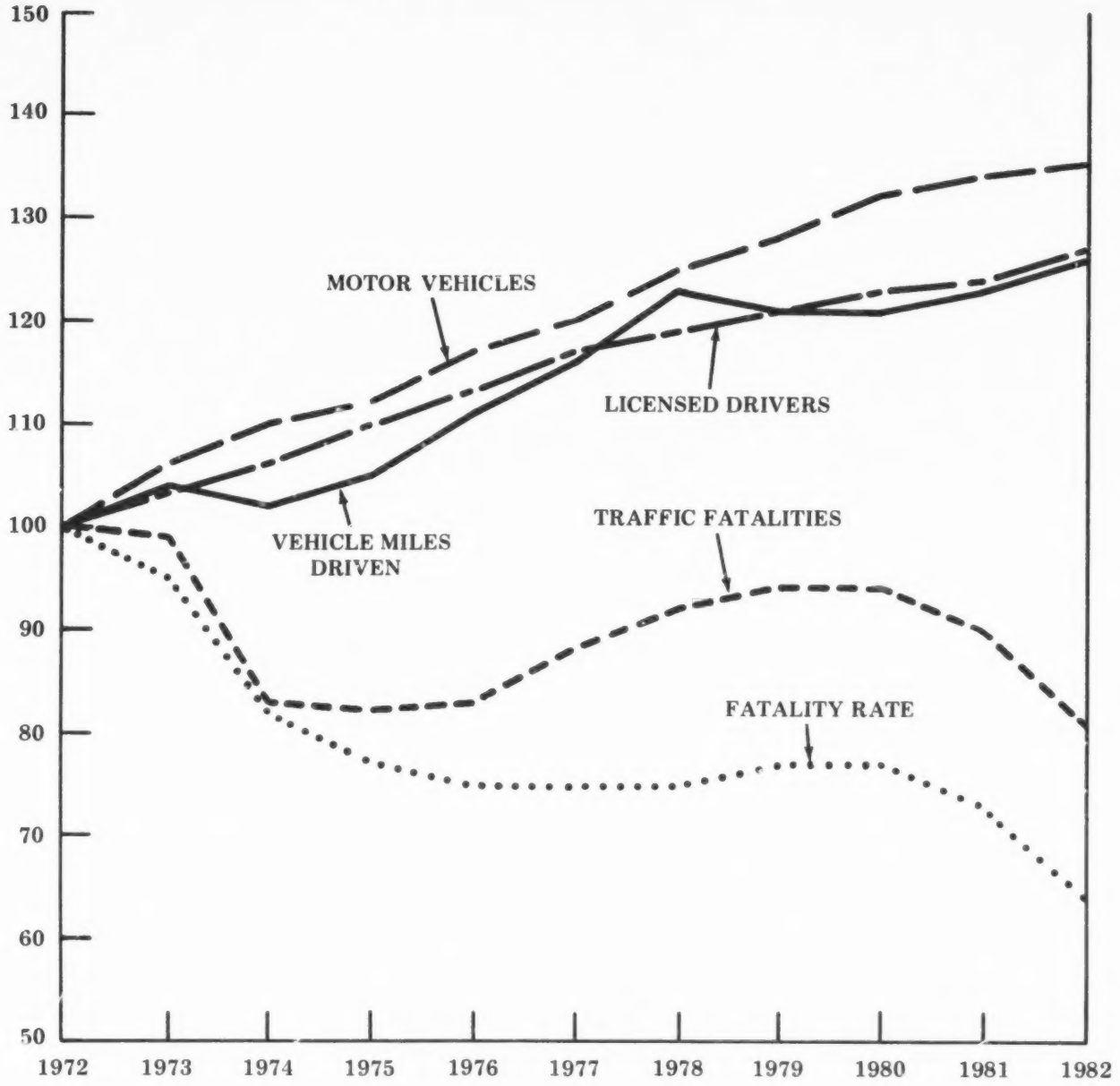
BEST COPY AVAILABLE

FIGURE 6. Relative Changes in Amtrak Costs, Revenues, Operations and Performance, Fiscal Years 1973-1982.



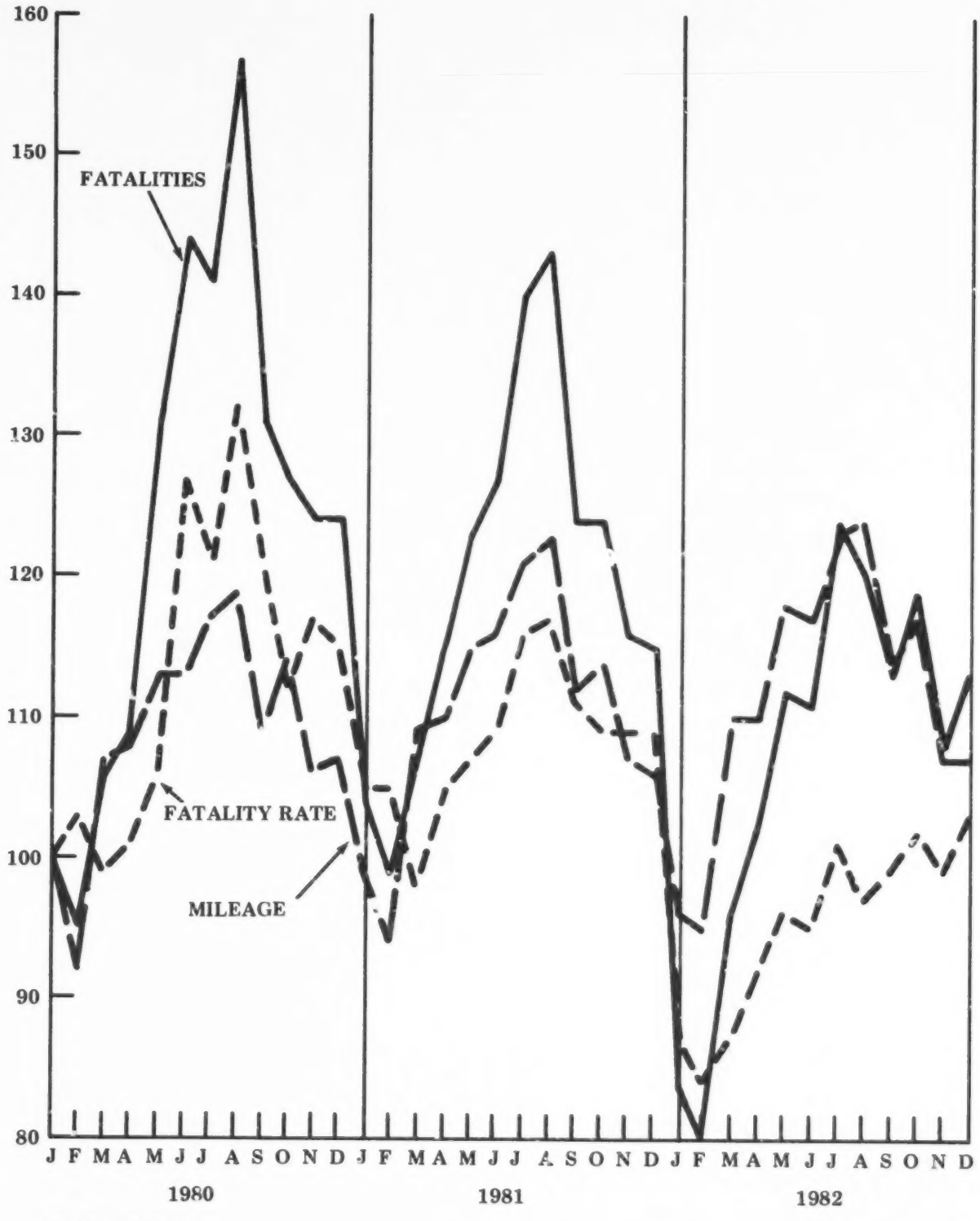
BEST COPY AVAILABLE

FIGURE 7. Relative Changes in U.S. Motor Vehicle Activities, Fatalities and Fatality Rate, Calendar Years 1972-1982.



BEST COPY AVAILABLE

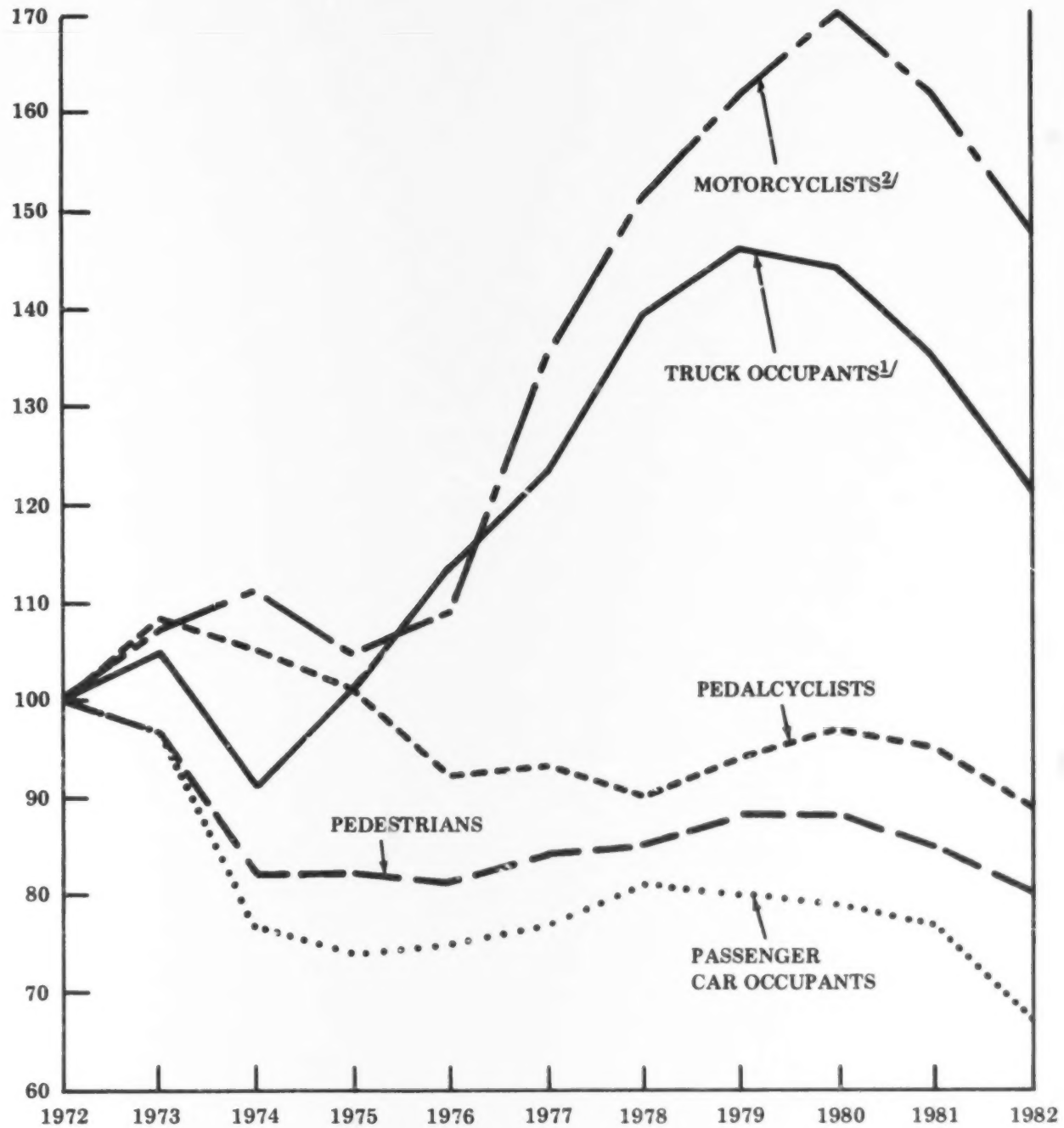
FIGURE 8. Relative Changes in U.S. Traffic Fatalities, Mileage and Fatality Rates, Calendar Years 1980-1982.



INDEX = 1980

BEST COPY AVAILABLE

FIGURE 9. Relative Changes in Highway Fatalities by Principal Categories, Calendar Years 1972-1982.



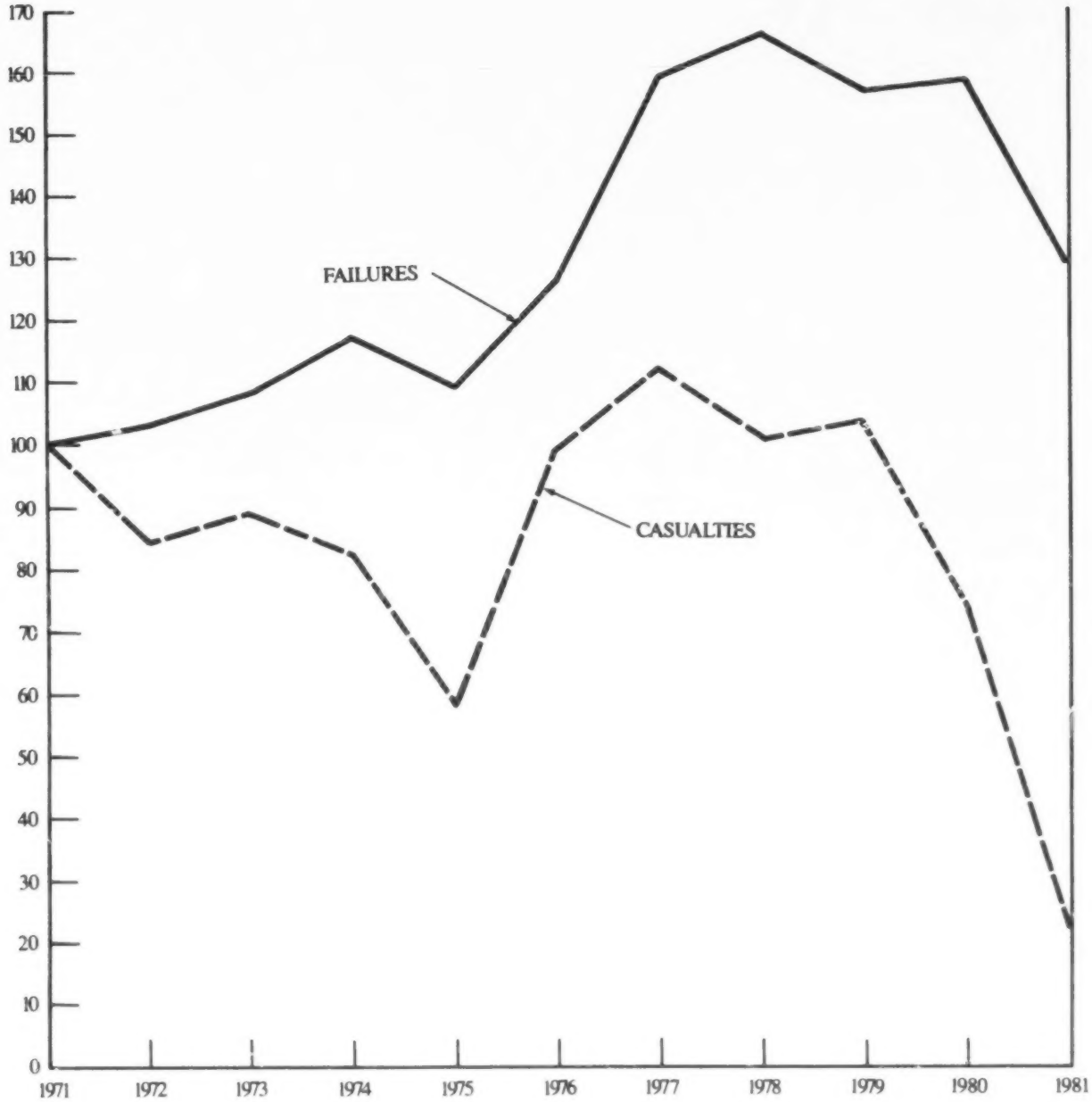
1/ Includes pickups, vans, and heavy trucks.

2/ Includes mopeds, motorscooters, and motorbikes.

INDEX = 1972

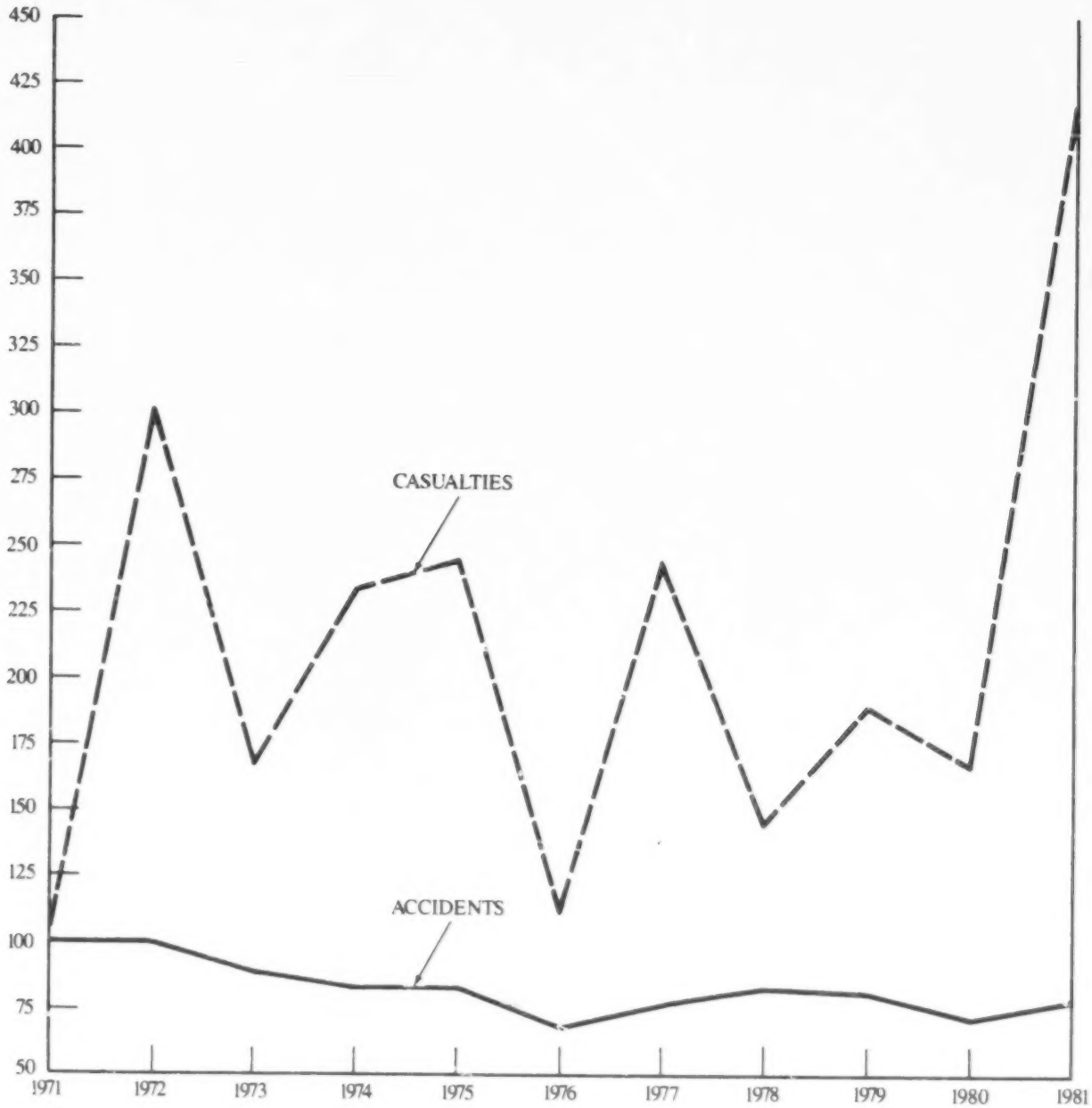
BEST COPY AVAILABLE

FIGURE 10. Relative Changes in Reported Gas Pipeline Failures and Casualties, Calendar Years 1971–81.



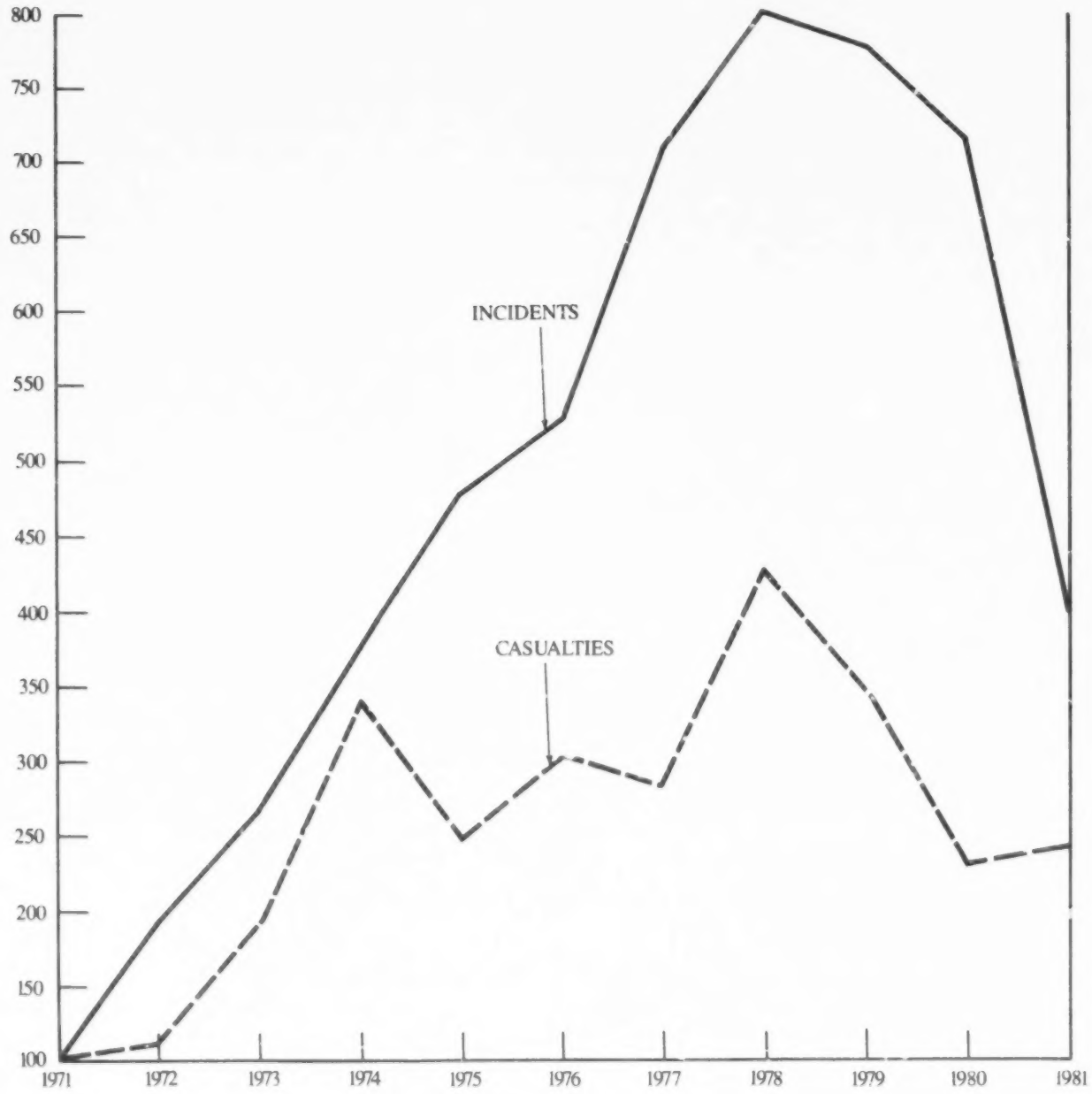
BEST COPY AVAILABLE

FIGURE 11. Relative Changes in Reported Liquid Pipeline Accidents and Casualties, Calendar Years 1971–81.



BEST COPY AVAILABLE

FIGURE 12. Relative Changes in Hazardous Materials Incidents and Casualties, Calendar Years 1971–81.



BEST COPY AVAILABLE

* U.S. Government Printing Office: 1987 0-181-763 (40206)